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THE SPIRIT

OF

MILITARY INSTITUTIONS;

OR,

ESSENTIAL PRINCIPLES

OF

THE ART OF WAR.

BY

MARSHAL MARMONT,
DUKE OF RAGUSA.

TRANSLATED FROM THE LATEST EDITION, REVISED AND CORRECTED BY THE AUTHOR;

WITH ILLUSTRATIVE NOTES,

By HENRY COPPÉE,
PROFESSOR OF ENGLISH LITERATURE IN THE UNIVERSITY OF PENNSYLVANIA
LATE AN OFFICER OF ARTILLERY IN THE SERVICE OF THE U. S.

PHILADELPHIA:
J. B. LIPPINCOTT & CO.
1862.

MARSHAL MARMONT'S DEDICATION.

TO THE ARMY.

I DEDICATE my book to the army.

The army was my cradle; I have passed my life in its ranks. I have constantly shared in its labors, and more than once I have shed my blood, in those heroic times the memory of which shall never be lost.

Arrived at that age when all the interest and the consolations of life are found in meditating upon the past, I address to the army a last token of remembrance.

The soldiers, my companions in arms, united in themselves all the military virtues. To valor and to the love of glory, natural to Frenchmen, they joined a great respect for discipline and an unlimited confidence in their commander,—the first elements of success.

And thus, under my command, never, with equal forces, have they been beaten. Often conquerors, in spite of inferiority of numbers, they but very seldom yielded even to an immense superiority of force, or to the fatality of circumstances, and even then they always remained formidable enough, in the midst of reverses, to cause the enemy almost to regret his victory.

The soldiers of the present day march worthily in the footsteps of their predecessors; and the courage, patience and energy which they have unceasingly displayed in the long and painful war in Africa, demonstrate that always and everywhere they will respond to the needs and the exigencies of the country.

The former were the object of my most assiduous cares and of my liveliest solicitude.

The latter, as long as I live, shall have my warmest sympathies.

THE MARSHAL DUKE OF RAGUSA.

TRANSLATOR'S PREFACE.

THE work now presented to the public has remarkable claims to the respectful attention of military men.

The French title, "*De l'Esprit des Institutions Militaires*," is perhaps most exactly translated, "Essential Principles of the Art of War." Here then will be found a condensation of these principles, not gathered from books, but presented from the author's experience of campaigns in which he played important parts, and on battle-fields of which he was an eye-witness, and, in many cases, a commander of the highest grade.

A brief enumeration of the principal events in his career will prove that he was essentially a fighting man and a skilful general, who has won the right to lay down the principles and make the criticisms contained in this work.

AUGUSTUS FREDERICK LOUIS VIESSE DE MARMONT was born at Chatillon, on the Seine, July 20, 1774. He was a sub-lieutenant before he was sixteen; and was with General Bonaparte at Toulon, and during the campaign of 1796 in Italy. He was the first man to disembark of the expedition to Egypt. Having returned with Bonaparte to France, he was with him on the 18th Brumaire; and in the campaign of 1800 he was director of the artillery, in its difficult passage over the St. Bernard and under the guns of the Fort of Bard, as well as on the victorious field of Marengo. At the end of the campaign he was general of division. He rendered excellent service at Wagram in 1809; and at Znaim was made Marshal of the Empire and Duke of Ragusa. Transferred to the command of the army of Portugal in place of Massena, in 1811, he displayed great skill; but lost the battle of Salamanca, being wounded early in the action. His arm was amputated a few days afterwards, and he was incapacitated from taking the field until 1813. In that year his genius and valor were splendidly conspicuous at Lützen, Bautzen, Dresden and Leipsic. In the terrible battle around Leipsic,

of which he gives us such graphic glimpses, he was badly wounded in several fingers of the remaining hand; but, guiding his horse with one sound finger, he charged the enemy at the head of his reserves.

Too much praise cannot be accorded him for his untiring energy and cheerful valor in the movements upon French soil in 1814. The fields of Brienne, Champ-Aubert, Vauchamps, Montmirail and others bear witness to his worth. His dispositions for the defence of Paris, and the battle which he fought there against overwhelming numbers on the 30th of March, 1814, were a fitting close of his military life; they were splendid efforts.

I need not enter upon the question of his evacuation of the city, and his submission to the Bourbons, further than to say that he was empowered by Joseph Bonaparte to open a conference with the allies, and that he stipulated for a guarantee of life and liberty to the Emperor Napoleon.

My task does not require me to speak of his career under the Restoration: he remained true to the Bourbons.

Those who desire fuller information may find it in his Memoires, 9 vols. 8vo., in which he vindicates his political and military conduct.

I have kept as close to the original as the idiom would permit, so as to present the author's very words: the few notes, generally of a popular character, are designed for elucidation to the general reader: the military man will find the original clear enough without notes. The author's notes are marked with the initial of his name, M.

My object in translating the work is to offer to the patriotic soldiers now in the field, in defence of the government, constitution and laws, a summary of the great practical principles of the art of war, which they may daily apply. Indeed, I have been struck by finding on almost every page some exact elucidation of military questions now arising, explanations of our military successes, and reasons for the reverses we have sustained. This is not a proper time to draw the parallels; they must be left to the intelligence of the reader and the labors of the future historian.

H. C.

PHILADELPHIA, February 20, 1862.

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INTRODUCTORY.

No modern work upon the art or the institutions of war, contains a complete body of doctrine.* Some special treatises have been published, upon the different arms; but, in general, the principles of the matter have not been laid down. In them we obtain superficial glimpses of the technical and minute details, without a sufficient indication of the great aim and the means by which it is attained.

Ancient writers have investigated military questions more profoundly; but how can their theories be appropriate, since the discovery of gunpowder has modified so completely the science of war?

Polybius and Vegetius† may still satisfy our curiosity;

* This seems to be wilful injustice to General Jomini, against whom the author was prejudiced; his *Précis de l'Art de la Guerre; Vie Politique et Militaire de Napoleon; Traité des grandes Operations Militaires; Traitē de grande Tactique*, etc., are the most valuable treatises on this general subject.

† Besides his histories, Polybius was the author of a work on tactics.

Vegetius, (*de re militari.*)

but let us look no longer in their writings for useful and applicable instruction.*

Ancient and modern wars have no point of resemblance,† except a moral relation, or that sublime part of the art which consists in a knowledge of the human heart,—knowledge, at all times, so important for the government of men, and which, in war, exerts an influence still more prompt and decisive.

All is changed in the form and the proportion of arms; their greater range keeps the combatants at greater distances; they impress greater terror, and produce also more prodigious results.

Add to this that formerly the combatants were in fewer numbers.

The command of troops offers at the present day far greater difficulties. Among the ancients, who fought always hand to hand, the army was compactly formed. The small number of soldiers occupied but a very limited space; its front was scarcely equivalent to that of one of

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* The author appears to confound the ancient works on *tactics* with the ancient military *histories*. Xenophon, Polybius, and Arrian have all written works, or sections of works, on the tactical systems of their day. These, indeed, may have no other interest for the modern military student, than to satisfy an antiquarian curiosity. But the same writers—and to them may be added a greater, Julius Cæsar—have likewise left behind them military histories—histories of ancient campaigns recorded by ancient soldiers.

† So far as the *tactics* of the ancient wars are concerned, yes. But not so for their *strategy*. Jomini, in his *Précis de l'Art de la Guerre*, (t. i. p. 12,) declares that "*strategy* was the same in the days of Cæsar, as in those of Napoleon."

our brigades. If a general could not exactly see each one of his soldiers, he could, at least, be seen by every one. Operating upon so small a scale, the supreme chief was able to betake himself everywhere; and this chief was himself a combatant, setting the example, sword in hand. In our days, the general fights by will and by thought; his skill in the management of the sword is of small importance; his mind embraces a very different space from that spread before his sight: a general, in one word, is very much less of a soldier—although he should strive to become a good one—than a moral being who, by his influence over other intelligences, seems to govern events, like the mysterious powers of nature.

Thus modern war constitutes an entirely new art, which would find neither model nor elucidation in the wars of the Greeks and the Romans.*

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* *Contrà*, Napoleon. Dr. Arnold remarks: "Now it so happens, that one who well knew what military lessons were instructive, the Emperôr Napoleon, has selected out of the whole range of history the campaigns of seven generals only, as important to be studied by an officer professionally, in all their details; and of these seven, three belong to the times of Greece and Rome, namely, Alexander, Hannibal, and Cæsar." (The campaigns of the first two, it may be added, are best read in the works of Arrian and of Polybius.) It may be concluded, then, that Marshal Marmont is right in pronouncing the ancient works on *tactics* to be of no use to the modern student, but that he should not have said the same of their works on *strategy*—that is, their histories of such campaigns as Napoleon recommended for careful study. But even if we admit, that the ancient writers furnish nothing — in *strategy* any more than in *tactics*—to *copy*, they may yet be useful by what they do to *inspire*. When such a mind as Julius Cæsar's not only records his movements before Pharsalia, but also explains the *ratio* of them, it is

If the greatest captains of antiquity, if Alexander, Hannibal, Cæsar, could return to earth, and chance to come upon a field of battle, their military genius would understand nothing there; and they would need more than one campaign before they could completely embrace the mechanism of the profession, the consequences of our institutions, and of the new arms.

These truths are so evident to all who have made war, that it is asked how, even in the time of Louis XIV., the reveries of the Chevalier Folard were seriously entertained, and still later, the more foolish reveries of Ménil-Durand, to such a degree as to establish a camp expressly (at Bayeux) to make comparative experiments of formation and manœuvre. It is more astonishing still that a general of our own epoch (Rogniat, general of engineers)*

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impossible that the genius of the modern military student shall not be stirred and inspired, not only to copy but to emulate. Nay, it may well happen, that some original minds would derive less real inspiration from the reading of *modern* campaigns, wherein all the appliances and accompaniments are familiar and stale, than from that of *ancient* wars, in which, while the strategical genius was the same, it had to deal with means so widely different. It is in this way, perhaps, that we account for a portion of the attraction which the study of the Greek and Roman art of war has had for some of the most powerful military minds of modern times. The last work of Napoleon was a volume of memoranda on the campaigns of Cæsar.

* If General Rogniat's work (*Considerations sur l'Art de la Guerre*, Paris, 1820,) were really such visionary trash as our author would have us believe, it was sad waste of time in Napoleon to devote to it a volume of criticism. The book (with its *Réponse aux Notes Critiques de Napoleon*, Paris, 1823,) is, at least, a remarkably *interesting* one.

should have written a large book to resuscitate and amplify these delirious fancies; for if he did not figure among combatants, he had at least the opportunity and the necessity to witness battles.

I have proposed to myself, to sum up, in a brief sketch, the essential principles of military operations, organization and institutions. I have sought to demonstrate that nothing should be left to chance in this matter; that everything in it should depend upon a generating principle, from which necessary consequences flow.

A principle is discovered by a careful consideration of the end to be attained, and by then seeking the best means of attaining it.

Principles being established and recognized, genius properly applies them; and it is in this that the whole art of war consists.

It seemed to me useful to set them forth in the simplest manner; and to compose a kind of rudimentary system of the military art, which shall embrace at once all the branches of this art and the different services of armies; — by stripping it of the technical charlatanism which too often accompanies it.

Nevertheless, the study of military men is not limited to a knowledge of these principles: they ought, besides, to read attentively the history of the campaigns of great generals; for the entire genius of these superior men is displayed in the application of these principles.

In this direction the military literature of France is

particularly rich; but even here a choice may be made. We prefer to go back to the source; we limit ourselves to the works of those who have themselves commanded; for little fruit may be expected from those campaigns related by subaltern officers, who, strangers to all the difficulties of command, and often to the first ideas of the profession, set themselves up as masters, as censors; new Thersites, they are sarcastic in their language, but feeble in heart and arms; better constituted for talking than for fighting. Their works are a tissue of errors and falsehoods.

Above all the documents which ought to be carefully studied, may be recommended the dictations of Napoleon, published under the title of *Memoirs of Montholon.* In every line we recognize the superior genius, the powerful logic, the authority of the great captain. His opinions or his explanations, although sometimes susceptible of controversy, offer immense instruction; he who can meditate upon and understand them, will have the very instinct of war.

An older work, which cannot be too much studied, is the book published by the Archduke Charles of Austria,* under the title of *Principles of Strategy.* There may be seen the application of his principles to the movements which he made in 1796 against the armies of the Rhine

* Son of the Emperor Leopold II., born 1771, distinguished as a general in the wars of the French revolution. His great work is *Grundsätze der Strategie erläutert durch die Darstellung des Feldzugs von* 1796, *in Deutschland.* Translated into French *for* Jomini, and annotated *by* him.

and of the Sambre-et-Meuse. It is a picture of all the rules of great campaigns.

The Memoirs of Marshal Gouvion St. Cyr,* and the History of the Campaign in Russia, by M. de Segur,† may be read with advantage. It is from such sources that wholesome instruction and the surest ideas must be drawn.

I have long studied the constitution of the different arms, and their most proper employment; and I believe the principles true, which I am about to expound. I recommend them to those ardent, intelligent and valorous young men, who are taking our places. It is for them that I have written.

The work now presented to the public is the last contingent of service which I can offer, at the close of my life, to the profit of a science which I have always cultivated with ardor, and of a profession which I have pursued with enthusiasm.

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* Louis Gouvion St. Cyr, born 1764. In 1795 a general of division; in 1798, in command at Rome; in 1799, with Moreau on the Danube and at Hohenlinden; in 1812 with Napoleon in Russia; wounded at the retreat from Moscow. He served under the restoration; but, opposing the change in the law of elections, he resigned, went into retirement, and died in 1830.

† I visited in 1826, and spent a whole day upon, the battle-field of La Moskwa,—[the last battle, near the city of Moscow, before the entrance,]—with many French and Russian officers who had taken part in the action; I read, on the spot, the three well-known narrations of De Segur, De Chambray, De Boutourlin; in my opinion, the first mentioned alone gives an exact account of the manner in which the events must have transpired there.—M.

My leisure has found a charm in this summary of my studies and my remembrances. It is, moreover, the fruit of meditations, developed in my mind by my long and frequent conversations with Napoleon, by twenty campaigns of actual war, and by more than half a century of military experience.

PART I.

GENERAL THEORY OF THE MILITARY ART.

CHAPTER I.

DEFINITIONS.

Before entering upon the subject, I will begin with a few definitions.

The art of war is the aggregation of the various kinds of knowledge necessary for the control of a mass of armed men,—to organize it, to move it, to cause it to fight, and to give to its component elements their greatest value, compatible with their preservation.

A genius for war consists in the talent for applying these elements appropriately, and for proposing the best combinations, with exactness and promptitude, in the midst of dangers and crises.

Military genius is incomplete, if, to the faculty of making these combinations, which I will call technical, a general does not unite a knowledge of human nature; if he has not the instinct to divine what is passing in the souls of his soldiers, and of the enemy. These inspirations,

variable as they are, form the **moral*** of war; a mysterious action which gives instantaneous power to an army, and causes one man to be worth ten, and ten not to be equal in value to one.

There are two other faculties equally necessary,—authority and decision, which are natural gifts.

Moreover, if to constitute a great general, great intelligence is needed, still more is character requisite. It is character which presides at the execution of plans. It is character which, in both ancient and modern times, has caused generals of the first class to shine.

The military arts consist in the knowledge of the scientific or mechanical processes which regulate the details of action, and the employment of the proper means.

Thus, strategy, tactics, artillery, fortifications, organization, the administration of armies, are military arts which should be familiar to a general. Each art has its theory; but the talent to make use of it with advantage, demands frequent applications and an observant mind.

Of all human events, those connected with war demand more, doubtless, of the concurrence of that aid which is called experience. The soldier must become accustomed to danger, to that physiognomy of battles which presents so many different phenomena. The man born brave, will be able at the outset to expose himself to danger without fear and suffering, sometimes even with pleas-

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* This use of *moral*, although recognized, is classed by Bescherelle (Dictionnaire National) among the *Neologismes*.

ure; but it is only by the lapse of time that he will acquire the faculty of discriminating how he will be able to make, by offering his life as a sacrifice, the best possible use of it.

Finally, **the profession of arms** is—a life consecrated to military labors; and this expression is most properly applied to those who execute rather than theorize.

CHAPTER II.

GENERAL PRINCIPLES.

General principles for the conduct of armies are not very numerous, but their application gives rise to a great variety of combinations, which it is impossible to foresee and to lay down as rules.

The conditions in which an army finds itself vary almost infinitely; the principal points of view are — the combination, in one, of the elements which compose it; the relative condition of the two armies; the nature of the theatre of war, and of the neighboring territories; the part to be played, whether offensive or defensive; the reputation and character of the general against whom we act, etc. etc.

Various circumstances open an immense field to combinations; the greatest mind is incapable of embracing them all. Thus it happens that the greatest generals commit blunders; the best are those who commit the fewest. The more, however, we admit new elements into our calculations, the more we control events. A prudent foresight must embrace in its plans not only the probable, but the possible; and thus we have a proper guarantee against fortuitous risks. Thus it is that, in the day of reverses, we foresee and guard against great catastrophes.

This foresight was one of the highest faculties of Napoleon in his prime. His adversaries being almost always without it, the results which he thereby obtained astonished the world.

I will lay down, as principles, certain rules of which a general should never lose sight. I shall only indicate the aim and design; the means must always be subordinate to circumstances.

Two armies being of nearly the same force, and of about the same *morale*, the chances are equal. To render these chances more favorable, our movements should be combined in such a manner as to deceive the enemy, inspiring him with such fears as will lead him to divide his forces. Then the more skilful general, gathering his own suddenly together, overwhelms his divided adversary; and the momentary superiority which he has been able to acquire, makes the final victory comparatively easy.

Numerical superiority, at the very instant of the combat, is of extreme importance. Doubtless the quality of troops is more to be considered than their numbers; but, in the present excellent condition of the armies of Europe, the number and the combination of means concur powerfully to produce success. It is otherwise when civilized troops fight against barbarians, who, deprived of instruction and without discipline, do not form a compact aggregation. Operating without union and without harmony, they are always inferior, at a given time, to the weaker but more united mass by which they are opposed. Two

attacks repeated without success—often one, indeed—will decide the less brave to retire: the others are affected by the contagion of example, and soon all have disappeared. Conflicting opinions then take the place of arms. Thus are explained the wars of the Greeks against the Persians, the battles of Marathon and Platæa, the conquests of Alexander, the triumphs of the small Roman armies over the Germans and the Gauls, and, in our own time, the success of European armies against the Turks, notwithstanding the disproportion of numbers.

With the purpose of dispersing the forces of the enemy, we must harass him particularly upon those points essential to his safety, and promptly seize the moment in which he has yielded to our feints, to attack him upon a weak point with superior numbers. This is just what is called a **feint** in fencing phrase,—with the sword in hand, in single combat. Two or three slight partial advantages open the way for the more considerable ones which decide the fate of the campaign.

It is thus seen how important it is for a general to assume the initiative in movements: thus he overrules the design of his enemy, and a first success frequently gives an ascendency which is never lost. But the favorable moment must be clearly discerned. Too great a disproportion in force and in the various means, would be an insurmountable obstacle. We should wait until the confidence of the enemy leads him into error. Profiting diligently by the occasion when offered, the skilful general may thus obtain an advantage which will permit him to

turn the tables on his adversary, and to pass from defensive to offensive.

This is what happened, remarkably, in 1796, in the immortal campaign of Italy. The French army, having arrived at the frontiers of the Tyrol, and in a defensive position, found itself much inferior to the Austrian army, augmented as it was by the reinforcements led by Wurmser* in person. The enemy's general, in attacking, had divided his forces; the French general reunited his own, and soon a first success enabled him to assume the offensive in turn. Afterwards a series of victories succeeded, in combats where the French army was almost always superior in numbers, on the field of battle.

To sum up, in one word, this division of the art of war, which applies to the general movements of armies, it should be observed that it is always founded upon a calculation of **time, distance,** and **celerity of movement.**

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* Dagobert Sigismond, Graf von Wurmser, born in 1724, was a septuagenarian when in command of the Austrian army in Italy. After a siege of nine months he surrendered to Napoleon at Mantua in 1797.

CHAPTER III.

BASES AND LINES OF OPERATION AND STRATEGY.

The base of operations of an army is composed of the country which it covers, which furnishes its wants, which sends to it every day the supplies of every kind which it consumes,—of men, horses, provisions and munitions,—and which receives its sick and wounded, etc. etc.

The line of operation is determined by the general direction of the march, which is indicated by the object of operation, or the point which it is desired to attain.

The general movements which are executed out of sight of the enemy, and before an action, are called **strategy.**

Strategic points are those which it is important to occupy, whether to threaten the enemy's communications, or to cover our own. They should be chosen in such a manner as to facilitate the combinations of the movements of the different columns of an army. In general, the place where many roads meet is a strategic point; in a mountainous country, the place where many valleys come together is a strategic point.

Strategic lines are those which join strategic points, which are useful in the movements to be made between them; they should be the shortest lines possible.

In the judicious choice of strategic points and lines

consist the safety of armies in case of reverse, and the cause of the greatest results in case of success.

Napoleon possessed in an eminent degree a genius for strategy; no general has ever surpassed him in this respect; no one has been able better to discern, in advance, the point where he ought to strike.

A great army is composed of many **columns**; they are necessarily separated, that they may be subsisted and moved with facility. Their arrangement should be such that the most distant parts will be able to arrive on the field in time for battle, either to take part in the combat, or simply to act as a reserve. The aim of strategy is to combine the march for the promptest union of troops upon the same point; sometimes on the centre; sometimes on one of the wings. A march thus regulated is what Napoleon called his chess-board.*

His first campaigns were all of this character, except

* What Napoleon used to call his chess-board, was the field (zone) within which the movements which he was meditating, must take place. Thus, in 1813, with the complicated positions of his various *corps d'armées*, and those of his adversaries, before his mind's eye, he exclaimed to Marmont himself, (*Memoires*, t. v. p. 256,) 'L'échiquier est bien embrouillé; il n'y a que moi, qui puisse s'y reconnaitre!"—an exclamation from which Thiers felt bound, as usual, to take all its homeliness and strength. (*Le Consulat et l'Empire*, t. xvi. p. 511.)

It may be well enough to add, that the figure, which Napoleon's chess-playing propensities led him thus habitually to employ, has been adopted by Rüstow, in his *Allgemeine Taktik*, (Zurich, 1858,) and has been carried out by him with true German completeness:—"From this," (he says, p. 27,) "it follows, that the *number* of the *divisions* of an army cannot be a matter of indifference. While the commander-in-chief is assigning them their respective places upon

Marengo, where, deviating from this principle, he was on the brink of defeat.* Everywhere else he is seen upon the day of action, assembling upon the field of battle all the forces of which he could reasonably dispose.

Moreau, on the contrary, whose talents have been so much praised, understood nothing of strategy.† His skill was shown in **tactics.** Personally very brave, he handled well, in the presence of the enemy, the troops occupying the space which his eye took in; but he fought his principal battles with only a part of his disposable strength.

At Hohenlinden,‡ where his success was so brilliant,

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the given *chess-board*, he is really making a kind of composite *problem*. The divisions are the *pieces*, which he makes use of for this purpose. The distribution of these pieces corresponds to the subordinate problems, the successive *solution* of which effects the solution of the problem as a whole. The number of these subordinate problems, into which the main problem is subdivided, is repeated much in the same way upon any chess board, every theatre of military operations," etc. etc.

* The principal detachment was that of Desaix, which was too far off on the morning of the battle. Its forced march, and participation in the renewed battle of the afternoon, were due to Desaix, and not to the prevision of Napoleon.

† Napoleon himself expressed at that time his conviction and disappointment that Moreau could not command one hundred thousand men; and that there were not two men in France who could. His generals, however, soon developed their powers under his instructions.

‡ The battle was fought on the 3d of December, 1800, between the French under General Moreau, and the Austrians under the Archduke John, in the forest of Hohenlinden, between the rivers Iser and Inn. The success of the French was in a great measure due to the intelligence and courage of General Richepanse, who succeeded in gaining the Austrian rear, and throwing the centre column into fatal confusion.

Moreau ought to have been defeated, and would probably have been, if the Austrians had not manœuvred with unexampled carelessness. The French army was composed of twelve divisions; the three on the right, commanded by General Lecourbe, and the three on the left, conducted by General Sainte-Susanne, took no part in the battle. The Austrian army was united, but desultory in its march; the centre column, which encountered no obstacle, and followed the high road, with almost all the artillery, presented itself unsupported, and without being formed in battle array; it could thus be attacked in flank. Such good fortune was not due to the dispositions of General Moreau. General Richepanse, a man of talent and courage, finding his division surrounded by Austrian troops, which were beginning to organize, faced them in every direction, and possessed himself of a hundred pieces of cannon which were marching in column over the causeway.

The reunion of an army at the moment of battle being the *aim*, and **rapidity of marches** the *means*, the **divisions,** which are the *units*, should be combined, and to that end should be easy to move. An entire army will always have (although it may arrive in time) a slow movement; but rapidity may be given to the elements which compose it. To this end divisions should not be overburdened with artillery and subsistence stores. I do not approve the Russian usage of encumbering them with cannon. The great reserves of material and provisions of every kind should have an independent march; should be sufficient for themselves, and, in case of need, should be

escorted by special troops. It is the province of the general-in-chief to hold them always within reach of the place where they will be most useful, according to their destination.

There is another object which should call forth all the solicitude of a general, viz., to cover perfectly his line of operation, while at the same time he threatens that of the enemy. Open communications are necessary to the maintenance of an army; once lost, the moral condition is compromised. Confidence, that power of opinion the place of which nothing in the world can supply among troops, does not always resist such a trial.

Hence the necessity of an extended base of operations. If one stronghold and many fortified points are situated upon this base, or a great river form a part of it, great advantages result. The more extended the base, the better is the line of operations covered. It was a fundamental axiom of Napoleon. It is never departed from with impunity. In his splendid campaigns of 1805,* 1806,† and 1809,‡ he has presented great examples, and profited skilfully by the favorable circumstances which the direction of our frontier gave him.

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* 1805. The coalition of Russia, Austria, Sweden and England; the naval defeat of the French at Trafalgar, was more than compensated by the capitulation of Ulm, and the splendid victory of Austerlitz, which produced the peace of Presburg.

† 1806. The Prussian campaign, containing the victory of Jena, and the entry into Berlin.

‡ 1809. The campaign of Aspern, Essling, and Wagram, terminating in the truce of Znaym.

Two armies which have bases of operation parallel, and of the same extent, are in similar conditions; and either one, in turning the other, is also forcibly turned. But it is not the same, if the two bases of operation are of different lengths and inclined towards each other.

In 1805, the French army, after the fine march from the coasts of the English Channel into Germany, directed itself upon the flank and rear of the Austrian army, which had invaded Bavaria. A battle lost upon the Danube would have thrown it back upon the Rhine; a battle gained caused the conquered army to lay down its arms.

In 1806, the French army, at the opening of the campaign, found itself upon the flank of the Prussian army; it was not the less careful to preserve its communications open with France from Mayence to Basle; and these communications were so well assured, that a reverse could have no great consequences, while a single victory produced the results so well known.

In 1812,* when Napoleon strayed to an unmeasured distance from his point of departure, (for, let it be observed that the dimensions of a base of operation to satisfy existing conditions are not absolute, but relative to the length of the line of operation,) his base was lost. Established at first upon the position of the different corps of his army, it would have sufficed if the army had remained nearer the frontier. But these bodies being abandoned to themselves, fluctuating, subjected to the chances of war, and encoun-

* The campaign in Russia.

tering hostile bodies of at least equal forces,—the army in the end lost all its communications. When they reached the banks of the Beresina, Napoleon was about to succumb; and the army would have been shattered to fragments, without a kind of miracle, the merit of which Admiral Tchitschakoff and General Kaptzievitsch may appropriate to themselves.*

But there are circumstances in which it is useful and salutary to change, in the midst of a campaign, the direction of the line of operation, and to choose another base; and although the most natural idea and the most habitual usage may be to place ourselves in front of the country which we wish to defend, it sometimes happens, nevertheless, that it is placed more efficaciously in a safe condition, by assuming a line of operation which seems to abandon it and deliver it up to the enemy.

When in 1797,† after the surrender of Mantua, the French army marched upon Vienna, the Austrian army, which found itself too inferior to offer battle, retired in the direction of the capital. If, instead of operating thus, it had taken post in the Tyrol, the natural obstacles which the country presents would have established a sort of equilibrium between the respective forces; the newly-

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* "Tchitschakoff with the bulk of his forces was before Borisov, fully deceived by the pretended intentions of the French below that town, and he had only a detachment of light troops at Studianka."—THIERS, *Consulat et l'Empire.*

† The close of the first campaign in Italy.

raised troops of Hungary and Croatia, who could not be of good service on a day of battle, would have sufficed to cover the frontier of Friuli,* hold in check a French corps, and paralyse its action, notwithstanding the excellence of its troops, (for the French army had none but good troops.) Besides, the Austrian army, by taking this line of operation, would have gone to meet strong reinforcements, which could only come to it from the banks of the Rhine. In fine, if the war had carried the belligerent armies into Suabia and Bavaria, all the Austrian forces, reunited at the centre of operations, would have had the power to manœuvre under the most advantageous conditions. The Austrian army was then very wrong in taking the line of operation which it adopted.

Here is another example: In 1814, the Marshal Duke of Dalmatia, (Soult,) after having operated upon the Adour, was obliged to quit the basin of that river, and he directed his line of operation upon Toulouse. In this he acted wisely, for he thus kept off the English army from the centre of France, more certainly than in retiring upon Bordeaux, where they would have followed him: a small body of troops, supported by the national guards, placed in rear of the waste lands, and covering Bordeaux, would have guaranteed the safety of that town, if the spirit of the times and the political complications of the interior had not rendered these wise dispositions useless.

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* An old province of Northern Italy, now forming the circle of Goritz, part of Triest, and the delegation of Friuli.

To sum up—**Strategy** has a double aim:—

1. To unite all the troops, or the greatest number possible, on the field of action, when the enemy has only a part of his own there; in other words, to cherish a numerical superiority for the day of battle.

2. To cover and insure our own communications, while threatening those of the enemy.

CHAPTER IV.

TACTICS.

Tactics is the art of handling troops upon the field of battle, and of manœuvring them without confusion. The end to be attained is to preserve order, in the midst of the apparent disorder produced by such a multitude of men, horses and machines, the combination of which forms an army,—and to obtain from them the greatest advantage.

Tactics is the science of the application of manœuvres. One may be a great tactician without any genius; but one does not become so without great practice: nothing is more simple to conceive than the theory; but the practice is not without difficulties. The general must be familiar with the means foreseen and calculated by the regulations; he must at one glance know how to judge of a field, estimate distances, determine clearly the direction, appreciate the details, combine the links in the chain of circumstances.

This kind of merit was incomplete in Napoleon; a fact explained by the first part of his career.

Simply an officer of artillery, up to the moment when

he was placed at the head of armies, he had never commanded either a regiment, a brigade, a division, or an army corps.* He had not been able to acquire that power of moving troops upon a given space which is developed by daily habit, ceaselessly varying the combinations. The wars in Italy offered him scarcely any application of this nature, the habitual actions being reduced in general to combats of posts, to the attack or to the defence of defiles, and to operations in the mountains.

Later, when he had attained to the supreme power, the strength of the armies which he led, requiring their organization into army corps, rendered the application of tactics less necessary to him. A general, at the head of eighty, one hundred, or one hundred and fifty thousand men, only gives the impulsion; he fixes the principal points of the movements; he establishes the general conditions of the battle; he provides, in fine, for the great accidents which may occur; he is the living providence of the army. The generals who manœuvre and fight are those who command thirty thousand men, and the generals under their orders; these latter should be familiar with tactics. If I have acquired some reputation in this respect, I owe it to my long sojourn in the camp of Zeist, where, for more than a year, I was constantly occupied in instructing excellent troops, and in instructing myself,

* Brigadier-General Chanez, former sergeant of the Gardes Françaises, commanding officer of Paris during the winter of 1795–96, taught the manœuvres to General Bonaparte, who was then general-in-chief of the army of the interior.—M.

with that emulation and fervor which a first separate command in the palmy days of youth, affords.

Tactics has the same aim as strategy, but upon a smaller scale and a different theatre. Instead of operating over a vast country, and for whole days, the action is upon a battle-field the extent of which is embraced by the eye, and the movements upon which are accomplished in a few hours. The basis of the combinations, the proposed aim, is, always to be stronger than the enemy at an indicated point of the battle. Tactical talent consists in causing the unexpected arrival, upon the most accessible and the most important positions, of means which destroy the equilibrium, and give the victory; to execute, in a word, with promptness, movements which disconcert the enemy, and for which he is entirely unprepared.

To this effect it is essential to employ reserves appropriately and with judgment: this displays the true genius for war. We should carefully avoid using them too soon or too late; if too soon, we employ our means uselessly, and deprive ourselves of them at the moment when they will be most necessary; if too late, we either allow the victory to be incomplete, or the reverse to increase and become irreparable.

Every soldier should be compelled to expend his entire energies; but exhaustion comes, and it is at that moment, so important to recognize, that the use of succors is urgent. One thing is certain,—they will not fail to be asked for a long time before the urgency is real.

Napoleon was very skilful in this respect; he saw

clearly the knot of the battle. At Lützen,* he furnished me with a splendid proof. The engagement was unexpected. Believing the enemy to be in retreat, the emperor had set out for Leipsic with two army corps, and had directed me to make a strong reconnoissance upon Pegau. Starting from Rippach,† where I had passed the night, I deemed it prudent to make my movement by the right bank of the ravine, although this was the longer road. I did not wish to endanger my communications with the main body of the army, which owed its safety to this circumstance. I reached Starsiedel, in battle order, precisely at the moment when the enemy, having surprised the third corps, was about to surround and destroy it. I had the time to cover it partially, and to protect its right, while it flew to arms. The battle was fought immediately: immense masses of troops, an enormous cavalry and a considerable artillery attacked me. While the third corps was sustaining at Kaya a very obstinate infantry engagement, Napoleon flew to that point. The forces which I had in my front, constantly increasing in numbers, I sent to ask him for reinforcements; he sent word back that the battle was at Kaya, and not at Starsiedel; and he was right. I had indeed hindered the loss of a battle at its beginning, but it was in the centre that it was won.

In other circumstances Napoleon judged less justly.

At the Moskwa, he displayed a fatal circumspection

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* Campaign of 1813.

† Where Marshal Bessières was killed.

in refusing to allow his guard to march, when at two o'clock General Belliard came to ask it of him. The Russian army was then in the greatest confusion; immense results would have been obtained with fresh troops; one hour of respite saved the enemy.*

Napoleon was thus unfaithful to one of his favorite principles, which I have heard him repeat: "That those who preserve their fresh troops for the morning after a battle are almost always beaten." He added: "If it be necessary, the very last man should be given up; because on the morning after a complete success there are no more obstacles before us. Opinion alone insures new triumphs to the conqueror."

In the same manner, at Waterloo, Napoleon caused his guard to charge too late. If it had marched whilst the cavalry was performing prodigies, the English infantry would probably have been overthrown, and the French army, disembarrassed of the English, would have been able to receive, fight and conquer the Prussians.†

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* This is echoed by Thiers, (*Consulat et l'Empire:*) "At the great battle of Moskwa his hesitation to send his guard into action was probably the cause which prevented the complete destruction of the Russian army." But he afterwards extenuates the fault: "If at the Moskwa he did not make use of his guard, it was because he found it necessary to act cautiously in an enterprise of which he began to see the folly."

† He contemplated a last charge just before the forward movement of the allies. "Napoléon, ayant réuni dans ces entrefaites les six autres bataillons de la vieille garde détachés sur divers points, se dispose a seconder les efforts sur Mont-Saint-Jean, lorsque le

To sum up—**Tactics** may be defined:—the art of movements executed in presence of the enemy, using the formation which offers most advantages, and which is most in harmony with circumstances.

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désordre qui commence à se manifester dans la droite du corps d'Erlon, le contraint a faire former ces bataillons en carrés."—JOMINI, *Camp. de* 1815, p. 215.

CHAPTER V.

MANŒUVRES.

Manœuvres are the means by which the principles of tactics are applied. They consist in the art of moving masses, and of causing them to pass, without confusion and with rapidity, from the order of march to the order of battle, even in the midst of the fire,—and the converse.

Troops may fight and march in all the formations; but there are some preferable to others; certain of them for fighting, others for marching; and formations for battle vary also according to circumstances.

Thus troops are **deployed** when they are to receive the enemy, and he is marching upon their position—to subject him to an extended fire; otherwise he would approach almost without danger. If we are marching upon him, we may also deploy; but that is not without great danger, on account of the fluctuating character of a march in line of battle, and the disorder which may result from it. It is preferable, therefore, to have only a part of the troops deployed, and to alternate these with columns, which are so many compact points where the authority of officers will have less difficulty in maintaining order. It was with this formation that the right and centre of the French army in Italy traversed in 1797 the vast plains of the Tagliamento, in presence of the Austrian army.

The attack of a position requires the most rapid march, and, the space to be passed over being often bristling with obstacles, the troops should always be formed in column by battalions. These little masses are easy to move; they cross, without difficulty, all the defiles; the rear, less exposed to the fire of the enemy than the front, pushes the front forward, and thus they arrive at the point to be attacked the more quickly.

As a complement to this disposition of troops, a great number of skirmishers should precede the columns, and march in a direction corresponding to the intervals of the battalions, in such a manner as to divide the fire of the enemy, and to cover the deployment if it becomes necessary, without masking the heads of columns, which may immediately commence firing. The skirmishers thus placed will find themselves supported; they have rallying points, designated and within reach, and they can never be compromised.

The formation in square can be only accidentally made, and for the purpose of resisting, in an open country, the attack of a numerous cavalry. As this formation does not easily agree with the ordinary movements and with a combat against infantry, troops should be accustomed to pass as rapidly as possible from the deployed order to the deep order, and *vice versa*.

We have seen nevertheless, in Egypt,* troops formed in squares for the march, and for whole days at a time.

* Montholon, (Dictations of Napoleon at St Helena,) *Campaign in Egypt*, where the necessity of the formation is fully set forth.

But that happened from two causes:—it was desired to assure and inspirit the soldiers against the impetuous attacks of a new enemy, and to cover and secure the sick, the wounded, and the artillery.* A superfluous and almost ridiculous depth was given to the squares, by placing the men in six ranks. It is true that this was changed as soon as it was found that the precautions were exaggerated, and they were satisfied with a square of three ranks, and even of two; nor did they recur even to this formation except at the moment when they foresaw an immediate charge of the enemy.

In general, the march in square is detestable; however little it is prolonged, it leads to disorder; for the conditions of the march are not the same upon the different sides of the square, two sides marching in line of battle and the other two by the flank.

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* Add to these the savans whom Napoleon had taken with him into Egypt: "They had been supplied with asses, the beasts of burden easiest attained in Egypt, to transport their persons and philosophical apparatus; and loud shouts of laughter used to burst from the ranks while forming to receive the Mamelukes, when the general of division called out with military precision, 'Let the asses and the savans enter within the square.' The soldiers also amused themselves by calling the asses demi-savans."—*Scott's Life of Napoleon.*

PART II.

THE ORGANIZATION, FORMATION AND MAINTENANCE OF ARMIES.

CHAPTER I.

THE ORGANIZATION AND FORMATION OF TROOPS.

The organization and formation of troops are by no means arbitrary undertakings; they have for their aim, to render compact a combination of men, and with them to form a whole, a movable unit: the rules to be established rest upon conditions determined by the faculties of the individual commander, and by the nature of the arms which he employs.

To form troops, the first thing to be done is to establish order and secure obedience. It is with this aim that a classification and successive ties have been conceived, which, combined with skill, oblige a great mass of individuals to submit to the action of authority.

FIRST SECTION.

INFANTRY.

We commence by forming a small mass, easy to govern; we then unite many of these masses, subordinating their commanders to a superior commander: in this case, the unit is no longer a man, but a number of men united.

Thus a **squad,** composed of eighteen or twenty men, obeys a sergeant, aided by corporals; the **union of squads** forms a **company,** which is commanded by a captain, aided by subordinate officers; and **many companies** form a larger mass, called a **battalion.** The commander of a battalion, in contact only with four, six, or eight men, commands through them as a medium, and thus acts upon the whole.

The **company** is the element of the organization, discipline and administration: the **battalion** is the true military element in the infantry; the unit for battle. It is by battalion that movements and manœuvres are made; it is by battalion that the fighting is done.

As to the numerical strength of a battalion, it may vary, but only within certain limits, which are prescribed by the very nature of things. We should not adhere to the letter of the proverb—"*The God of hosts is on the side of the heavy battalions*"—a proverb, moreover, which is doubtless understood to apply to large armies, thus designating the whole by a part. Two conditions are observed in the numerical composition of a battalion. It should be easy to move, and, when deployed, the voice of

the commander should be readily heard at both extremities of the line. Observing these limits, the number of companies, and the *personnel* of each company may be increased more or less, at will.

There is a proper proportion to be established in the number of officers and soldiers. That suggested by experience, as best uniting economy with good service, is—one officer to forty soldiers; or twenty-five officers to a battalion of one thousand men. It will be easily seen, that a great number of supernumerary officers has only the disadvantage of greater expense to the government; in every other respect they are useful, whether by multiplying the means of action, and of superintendence, and as models of courage, or by making an easy system of rewards, by more rapid promotion.

The effective force of organization differs also among nations. The strongest battalions are the Austrian, the weakest the English. The full number, in Austria, is over twelve hundred men; these are too many for good service. It is hardly possible, with such a number, to move with order and facility.

I see, however, an advantage in this arrangement: as losses in war are constantly occurring, and as recruits are often kept back, so large a battalion resists for a longer time; even a great diminution in its force does not render it unserviceable.

In France, we have habitually had weak battalions, and their effective force, even when entering upon a cam-

paign, is almost always below the prescribed number of the organization.

I will place, as the limit, one thousand men to a battalion; and that, because the number cannot be preserved entire, when it passes from a state of peace to that of war,—when it leaves the garrison to enter on a campaign.

As the result of constant observation, it may be said, that the corps best governed and in finest condition, undergoes at that period a diminution of one-fifth, *i.e.* of the men in the hospitals, the workmen who remain at the depot, the men belonging to the train, etc. etc. A battalion of one thousand men, has then no more than eight hundred men under arms; after a few months of the campaign it is reduced to five hundred, an effective force still sufficient in presence of the enemy.

The formation which is adopted for the battalion will also influence its numerical strength.

In all the continental armies the infantry is formed in three ranks; in England it is formed in two.* This latter formation seems to me far preferable. Nothing justifies the third rank.

Without entering into details concerning the firings, we may appeal to experience. *On drill* the firing may be by three ranks, but not *in war*. The French tactics prescribe that the musket shall be passed to the third rank, designing that rank only to load, not to fire. It is a

* The United States infantry are formed habitually in two, and for the reasons here presented.

theory not applicable when before the enemy, and a practical experience has condemned it to disuse. Fighting is done with musket firing when troops are in position. The best formation then is that which renders the fire most effective; which gives it the best direction, and greatest development. Indeed the third rank soon mingles itself with the two first: it takes instinctively the most advantageous formation; but the change being made contrary to order, brings with it a kind of disorganization. It would be better, for these reasons, to settle upon the formation in two ranks, and to render it permanent.

In placing the troops in three ranks, the design was to give them more consistence when marching in line of battle. But the means does not attain the end. Even in three ranks a line in movement is far from solid; and for a march in line of battle I would prefer a still deeper formation.

At all events, with a slight modification the formation in two ranks will fulfil all the required conditions. Thus:—

When in position, the troops have, by that very fact, a front half as large again. In marching in line, ploy the first and fourth divisions in rear of the second and third, and you will have four ranks, and at the moment of halting, you will present a front, less by a fifth, it is true, than that of the existing formation; but in two minutes it may be doubled. Here then, for the march, is a solid and compact formation, which will permit a battalion to fire

in every direction, in case of an unexpected charge of cavalry, which may have surrounded it, simply by an *about face*, executed by the first and fourth divisions, which have doubled on the second and third.

The formation in two ranks, with this disposition carried out when marching in line of battle, seems to me incontestably the best.

After the formation of the **battalion** comes that of the **regiment.** Here all is arbitrary, and depends upon the caprices of the organizing power. The regiment may be of two or three, or of four, five and six battalions; it is only a question of administration and economy.

The regiments composed of many battalions are less expensive, with the same number of men. There is economy in the organization of the staff, and in the advantages of a community of subsistence applied to the greater number. Such regiments have in general a better spirit, a regimental tone (*esprit de corps*) the more energetic, because there is a greater number of individuals honorably vieing for reputation and glory. They have more brilliancy (*éclat*) too in the public eye, their force putting them in condition to execute, without aid, the greatest plans.

In wars of invasion, in occupying extended countries, regiments thus constituted may form echelons in order to gather together as they march the men who have lingered in the rear. These intermediate bodies receive the recruits, set them up, and thus act as feeders to the battalions which are in front of the enemy. In this manner a

great economy of men is attained, an economy not less important than that of money.

In general, the regiment is an essentially administrative formation. It is of the character of a kind of social constitution, animated by a patriotic and domestic spirit.

The colonel is the chief of this form of municipality, the father, and the magistrate; and without any desire to depreciate courage, the first of military virtues, the essential qualities of a colonel, those which most influence the excellence of a regiment, are less an extraordinary intrepidity, than a spirit of order and justice, and great firmness. The best corps are those which are thus commanded.

On principle, a regiment of infantry should be instructed for every kind of service; and the conditions and necessities of war require that it should have a light infantry which should belong to, and be part of it. Nevertheless special light infantry corps have been deemed useful, and I share this opinion. For vanguards, for detachments, in intersected and mountainous countries, there are wanted men endowed with special instruction, who know, by a peculiar instinct, how best to surmount obstacles, and who, drilled to the greatest precision and address, know how to deliver the deadliest fire.

But, according to my judgment, in no army have the true principles been followed.

In France and in Russia, there are regiments of light infantry; these bodies scarcely differ, either in name or in dress, from ordinary regiments of the line.

Recently, in France, the **Chasseurs de Vincennes** have been established. This is a good institution, but incomplete in so far as that the battalions which compose this corps are not divided into campaign battalions, and garrison battalions, according to the principles which I shall enunciate hereafter.

In Austria, there are battalions of chasseurs; in England, there are light infantry companies belonging to a regiment which never leaves its depot. These two organizations are worth more than our own; but even they have need of modifications.

The regiments of infantry have their **voltigeurs.** In this respect, one immediate want is already satisfied. By recruiting the voltigeurs from the centre companies, men may be chosen who are most in condition to render good service.

The special corps of light infantry should have numerical strength proportional to the needs of heavy vanguards, and mountain warfare. Regiments of many battalions are too strong for this service; and as it necessitates an extreme division of soldiers, one chief cannot command a great number. Such an organization should be adopted, therefore, as would present to the enemy only a strong battalion.

This would be done by having three strong companies. I would propose that a battalion of light infantry should consist of twelve hundred men, formed into six companies of two hundred men each, each company commanded by five officers. But it is not sufficient that these troops

should have special instruction; they should have more vigor and youth than the others; the choice of men is of the greatest importance.

If a new corps is formed it may be constituted in the most satisfactory manner; and yet, at the end of a few years, there will be, to govern young soldiers, a heavy official organization, (*cadre,*) and the corps will have lost all its agility.

Light infantry corps should be composed of **two battalions,** the one of twelve hundred men, designed to be always maintained complete in numbers, and on a war footing; the other, of four companies, composed of from six to eight hundred men,—which I will call the garrison battalion,—designed to instruct recruits, to receive all the men yet in a condition for service, but who are no longer fit for the war of outposts, which requires so much vigor and youth.

I see another advantage in this disposition. There are thus placed in the hands of a general, very fine corps, which he may employ to garrison places or fortified posts, threatened by the enemy.

I know that it is always a painful resolution to station in garrison, a good regiment or a part of a good regiment, which is in a condition to take the field; but on the other hand it is both absurd and fatal to confide the protection and defence of such a place to poor troops. They surrender the place, at the first attacks of the enemy, and the general sees the prop (*point d'appui*) upon which he

depended disappear, at the very moment when most necessary to him.

In Spain, I twice suffered this painful experience General Dorsenne had formed the garrison at Ciudad Rodrigo* negligently, and that place, which had resisted for twenty-five days, of regular approaches, the siege of the French army, and the most powerful means, was taken in four days by the English, even while the army of Portugal was flying to its succor.

A little later, I had caused to be fortified, with the greatest care, the passage of the Tagus at Almaraz, in order to secure the communication of the army of Portugal with that of Southern Spain. Works reveted with masonry, joined with a redoubt, covered the left bank; advanced forts defended the only passage by which the enemy's artillery could débouche. This post of Almaraz was of the greatest importance; I had there placed garrisons of sufficient strength. But the troops were of a mixed character, and the poor troops were in the majority, particularly a German battalion called *Prussian.* The good troops occupied the advanced posts which defended the hill of Miravete. The enemy presented themselves unexpectedly; the English column which conducted the artillery was arrested, and could not pass. But another column, having passed by footpaths over the girdle of rocks which borders the elevated plain, arrived with scaling ladders, and attempted the assault. The least

* Vide Thiers, (*Consulat et l'Empire,*) January, 1812, where the details here referred to are given.

resistance would have been sufficient to repel such an audacious attack, executed in open daylight. The commander of the fort, Major Aubert, a very brave soldier, sprung upon the parapet to encourage his intimidated troops; he was killed; his death spread terror among his men, and the garrison fled to the other side of the Tagus, abandoning the fort to the enemy, who retired after having destroyed its means of defence.

SECOND SECTION.

CAVALRY.

In cavalry, as in infantry, the end to be attained comprises, order, obedience, facility of movement; but the manner of fighting and the nature of the weapons not being the same, everything differs in the application.

The fire-arms used by cavalry are a superfluous accessory; their most common use is as means of signals.

Cavalry is instituted for hand to hand fighting; it is to cross swords with the enemy, to shock, to overthrow, to pursue. To pursue an enemy is its habitual office; for it is rare that the two parties come into collision. Almost at the moment of contact, the less confident of the two halts, and then turns to flight.

The movements of this arm should always be rapid and impetuous; sometimes even—but only with small bodies—there may be a headlong movement which resembles imprudence.

The French cavalry is the finest in the world for fighting; its charges are fearless and thorough, (*au fond.*) It is sometimes indeed the victim of rashness; but in general, and upon occasion, what favorable results does such temerity produce!

In our first and immortal campaigns in Italy, how many thousands of prisoners were due to a mere handful of horse!

To command cavalry, where large masses are concerned, superior qualities and special merits are necessary. There is nothing so rare as a man who knows how to wield, conduct and use them appropriately. In the French armies, we can count but three in twenty years of war;—Kellermann,* Montbrun, and La Salle.

The qualities necessary for a general of cavalry are of so varied a nature, and are so rarely combined in the same person, that they seem almost to exclude each other.

The first thing to be mentioned is a sure and prompt *coup d'œil*, a rapid and energetic decision, which does not, however, exclude prudence; for an error made and a blunder committed, in the beginning of a movement, are irreparable in consequence of the small amount of time required to execute it. It is otherwise with infantry, whose march is always slow, compared with the movements of a general and his aides-de-camp.

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* The younger Kellermann, whose famous cavalry charge, when Desaix was leading his division against the advancing Austrians, won the day.

The cavalry general should study to place his troops under shelter from the fire of the enemy, and at the same time to keep them in position; but to lavish them when the moment of attack has arrived. The evening before a battle, and indeed until they are called out to fight, he will watch over the comfort, both of men and horses, with minute care; he will foster these forces in all their valor, but when the moment has arrived, he must know how to launch forth that cavalry without regard to the chances of loss,—with the sole purpose of making the most of them.

A general scarcely ever fulfils in the same degree these two conditions. One, of excellent administrative powers, takes good care of his cavalry; but, too much occupied with this thought, he does not dare to launch them upon the enemy, and they become useless on the day of battle. Another, always ready to lead them into action, takes so little care of them during the campaign, that they perish of want before they see the enemy. To cite two examples: We might reproach Murat with that want of care; and the contrary excess may be charged to the general who commanded the cavalry of the Imperial Guard, after Bessières* was wounded, at Wagram. If the charge had been made at the time when the offensive movement of

* Jean Baptiste Bessières, (Marshal of France and Duke of Istria;) born in 1768; entered as a private in Louis XVI. Constitutional Guard in 1791. Captain of Chasseurs in 1796, at the beginning of the first campaign in Italy; rose rapidly; was Marshal of the Empire in 1804; Duke of Istria in 1808: gained the famous battle of Medina del Rio Seco in Spain: wounded at Wag-

Macdonald, sustained by the artillery of the Imperial Guard, had overthrown the Austrian right,—twenty thousand prisoners would have fallen into our hands.

Cavalry, when about to attack the enemy, and the men to fight hand to hand, should never fight in column. This formation will serve to facilitate its march; but at the moment of its approach to the enemy, it must be deployed. A column of cavalry surrounded, is soon destroyed; for there are very few of the soldiers who are within reach to use their arms. Cavalry when deployed should be formed into two ranks, so as to check the disorder which might occur in the first rank: it was formerly in three; but it did not require much time to manifest the vice of that formation.

The fighting unit is called a **squadron**: the rule, for determining its strength, is to unite the greatest mobility with the maintenance of order.

A **squadron** having too great a front would be easily thrown into disorder by the slightest obstacle, and every troop in disorder is half conquered. Experience proves that the best formation, that which most completely unites strength and consistence with great facility of movement, is a squadron of forty-eight files, divided into four subdivisions of twelve each. Subdivisions of from sixteen to

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ram, 1809; killed at Rippach, the evening before the battle of Lützen, 1813

The officer here referred to was General Walther, who, when entreated by Macdonald to charge with the cavalry of the Guard, said he could only receive orders from Bessières. As Bessières had been wounded just before, no orders were given.

eighteen files would also be proper at the beginning of a campaign, especially with light troops, where more active service and numerous detachments weaken the corps.

The inconsiderable number of men and horses permits that arrangement in the cavalry, which would be impossible in infantry: *i.e.* the fighting unit is the same as the unit of administration.

In general, perfection in the service would demand in every arm an organization which may be at once applied to the combat and to daily existence, that is, to the arrangement of barracks, to administration and manœuvres; an organization which should constantly keep the troop in the hands of the same commanders, and would thus give it more fixedness and power.

Formerly the squadrons were composed of two companies. One of the two captains thus found himself subordinate to the other; this was a vicious combination. He who commands should have a social superiority, constant and determined, over those who obey him. Such is the fundamental principle of a hierarchy. Nevertheless, we did carry on war with squadrons thus formed; but after the peace a serious discussion engaged all the best minds; the squadron company was adopted, and the soldiers, whatever their position and circumstances, always remain under the orders of one chief.*

* Lieutenant-General Préval, who, under the restoration, was a member of the council of war, and one of its luminaries, is the author of the principal ameliorations which were then adopted at the organization of the cavalry.—M.

There is, in the formation of cavalry in line of battle, a difference between the usages of the French army and those of the German and Russian. With us, the squadrons are at equal distances from each other; with the others, they are placed together—two and two; and form a division without interval. This formation, preserving the same mobility to the squadrons, gives more consistence to each point of the line; and, in that respect, there is an advantage; but, on the other hand, in the French formation, the front of the line is greater with an equal number of combatants, which causes an extension of the wings. I will not decide between these two formations, the advantages and disadvantages of which seem nearly balanced.

Cavalry is a necessary arm in war, to reconnoitre and to give news of the enemy's movements. Such is the duty of the cavalry called **light**; it is the sight and hearing of the army: without it a general is at every moment environed with dangers.

Cavalry is also useful in fighting, and especially to turn a victory to profit. Without cavalry, a battle gained gives no decisive result.

We put that to the proof in 1813, after having conquered, at Lützen and at Bautzen, the Russians and Prussians, with our infantry alone :* it is a general opinion that these victories were of great importance; but no real

* After the almost annihilation of the *Grande armée* in 1812, the most difficult task for Napoleon was to create a proper cavalry force. This accounts for their inefficiency at Lützen and Bautzen.

advantage resulted from them. A flying enemy can always be rallied, when we do not reach him rapidly, at the moment of his disorder.

Cavalry in battle have a double object: 1st, to fight the enemy's cavalry, and to pursue the conquered army; 2d, to fight against infantry drawn up to resist it.

To fight against infantry, there is needed a **heavy cavalry,** barbed with steel, and sufficiently covered or sheltered from the fire, to attack it without fear. They should be armed with lances and sabres; each man should have simply a pistol; there is no need of other fire-arms, except a prescribed number of carbines to each squadron, so that every regiment shall have the means of informing itself when it is isolated.

There is a fourth kind of mounted troops, of very ancient institution,* and whose nature has been altered, it is difficult to say for what reason; I speak of **dragoons.**

In the beginning, they were only mounted infantry; they should always have preserved that character. With this condition dragoons may, in a thousand circumstances, render immense service: in detachments, for surprises, in retrograde movements, and principally in pursuits. But it is necessary that, in conformity with their establishment, they should be mounted upon horses too small to be put into line; otherwise, the aspirations and ambition of the

* It was Marshal de Brissac, who in the sixteenth century, during the wars in Piedmont, established the first corps of dragoons, and found great advantage in their use.—M.

colonels would soon change them into cavalry, and they would become at once bad infantry and bad cavalry.

A troop should have its creeds, its convictions, its faith, the resultant of sacred principles and even of prejudices, which are inculcated in their minds. But the intelligence of the soldiers must not be confused, by professing in their hearing opposite opinions,—by saying in a solemn manner—when they are exercised as cavalry—that cavalry must always triumph over infantry; and, when the moment for exercises on foot arrives, to teach them by counter-comment that a good infantry is invincible by cavalry. When applied, the axioms recur to the mind of the soldier almost always in an inverse application. As a foot-soldier he remembers to what extent the cavalry is the formidable arm; as horseman, he does not forget how much infantry is to be feared by cavalry.

I repeat,—nothing is more useful than the establishment of dragoons; but they must not be perverted.

The horses should be small, as has been said; their equipments, as well of men as of horses, should be solely calculated for the commodious and rapid service of a real infantry, armed with good muskets having bayonets, and well provided with ammunition. The dragoons should also be clothed and shod for ease in marching.

As to the cavalry, properly so called, **cavalry of the line and cuirassiers,** I would arm them with lances, and half-curved sabres, fit for the double purpose of pointing and cutting, and with a pistol: in each squadron, there should be twenty breech-loading carbines.

I have elsewhere considered the subject of the lance; and that I may not impair the unity of the matter, I will bring together the arguments which recommend that arm, "the queen of arms," according to the expression of Marshal Saxe.

I shall begin, however, with the remark, that it is in nowise a fit weapon for light cavalry, who having to defend themselves against numerous enemies at the same time, should be provided with fire-arms and with sabres. Notwithstanding, it is light cavalry which has been armed with the lance, in those countries into which it has been imported.

But we know with what facility new usages are adopted; in the most civilized countries the authority of example induces a blind confidence. We do not go back to the origin, nor to the circumstances which elucidate it; we do not consider essential differences; and hence we have faulty and undigested applications. Thus,—whence comes the improper employment of the lance in the arming of mounted troops? From the examples set to us by warlike hordes, such as the Cossacks and Arabs. These tribes inhabit plains where horses are abundant; they fight without instruction and without rule, and throw the lance with wonderful effect. It has therefore been said—considering them as light troops—the lance is the weapon for light cavalry.

The origin of this weapon has not been sought for, nor the reason why these tribes make so skilful a use of it.

In a barbarous country, where industry has not yet

penetrated, where there exist neither manufactures of arms nor armories, nor the money to buy them abroad, a man mounts his horse, and wants a weapon; he cuts a long branch from a tree of light wood, sharpens the point, hardens it in the fire, and that is the lance. A little later, he procures a large nail, and puts it at the end; his weapon becomes a more dangerous one. Finally, this rod is furnished with an iron tip, regularly fashioned, and behold the lance which our troops have adopted.

It is not of their own choice that the Cossacks and the Arabs arm themselves thus, but from necessity. And if they have become formidable by their skill in handling the lance, it is because they have used it from their infancy.

Nothing, with regard to light troops, specially organized in a civilized country, should be concluded from such examples.

The lance is the weapon for cavalry of the line, and principally for those destined to fight against infantry. The sabre cannot supply its place: armed with sabres, what use could cavalry make of them, if the infantry remain firm, and are not struck with fright? The horseman cannot sabre the foot-soldier; the bayonets keep the horse at too great a distance. On the other hand, let the horse—which remains the only offensive arm of the cavalry soldier—be killed; he falls and opens a breach, and that breach gives to those nearest to him the means of penetrating the ranks. The strife is then entirely to the advantage of the infantry. On the contrary, suppose the same line of cavalry, furnished with a row of pikes which

stand out four feet in front of the horses; and the chances of success are very different.

But the **sabre** is more befitting than the **lance** for **light troops.** In hand to hand conflicts, a short weapon is handled more easily, and is more advantageous than a long one. All other things being equal, it is certain that a huzzar or a chasseur* will beat a lancer; they have time to parry, and return the blow, (*riposter,*) before the lancer, who has thrown himself upon them, can recover himself for defence.

The sabre designed for light troops should be slightly curved; that which is perfectly straight is of less value for single combat.

The same troops should also be provided with fire-arms, whether as additional means of resistance, or to make themselves heard by the main bodies, for whose behoof they are sent to scout and reconnoitre.

With regard to cuirassiers, and all cavalry of the line, it would be proper to arm them both with the lance and the straight sabre. The first rank would then charge with the lance in rest; the second with the sabre in hand. Once the shock is made and the ranks mixed, the sabres of the second rank would do their office.

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* Lord Ellesmere, in the Quarterly Review for June, 1845, questions this assertion. He says: "If by 'toutes choses égales' be meant that the parties opposed shall have had nothing but the usual regimental instruction in the use of their respective weapons, we have no doubt that the Marshal is right; but we also believe that the lance is by far the superior weapon in the hands of a horseman bred and trained to its use." The reviewer is borne out by facts.

In the days of chivalry, battle was given directly in front; the charge was a direct one: the long weapon was of course preferable then; which explains to us the use made by knights of their lances.

I will cite a fact, in support of my opinion, concerning the manner of employing the lance, and obtaining the greatest effects from its use.

In 1813, at the battle of Dresden, our cuirassiers had made many charges on the left of the Austrian army, upon their infantry, which had been abandoned by the cavalry. The infantry steadily resisted; they repulsed our attacks, although the rain had put all their guns in such a condition that they could not fire. We could only overcome that resistance, by causing fifty lancers, who formed the escort of General Latour-Maubourg, to precede the cuirassiers; the lancers made a breach; the cuirassiers were able to penetrate and to make general havoc. It is true that the fire of the infantry was very feeble; but, under any other circumstances, the question would not have been uncertain, if the cuirassiers had been armed with the formidable lance.

The lance is equally successful in combats with cavalry, line against line, when the enemy has only sabres. It is admirable at the moment of attack. It is useful also in pursuit.

In a word, I feel authorized to say that, for cavalry of the line, the lance should be the principal weapon, and the sabre an auxiliary arm: that, for light troops, the equipment should consist of sabres and fire-arms. Doubtless

custom and prejudice will long contend against these principles, the truth of which I think nevertheless has been fairly demonstrated.

The Russian army possesses an immense advantage over all the other armies of Europe. The Cossacks, belonging to it, form a light cavalry, excellent, indefatigable and intelligent; they know how to find their way in trackless places, (*s'orienter,*) with precision, thoroughly to reconnoitre a country, to observe everything, and to take independent care of themselves.

They cannot be compared to any light troops, systematically instructed for that service: they are formed by nature; their intelligence is developed by the daily wants to which they are subjected. I speak of the Cossacks of the frontier, who, constantly at war with their neighbors,—always in presence of a skilful and enterprising enemy,—are obliged to be, at every moment, on the alert for their own safety.

The Cossacks of the Don, formerly admirable, have become less excellent, less intelligent, since their country has been covered by conquered provinces. But there are still large numbers of Cossacks guarding the frontiers of Asia; on the Kouban, upon the line, on the Therec, and east of the Caspian. Russia can prepare, and lead into Germany, more than fifty thousand of this cavalry, which will leave all the regular cavalry to be carefully cherished and strengthened, against the day of battle. This circumstance warrants us in considering the Russian hussars and chasseurs as cavalry of the line, and forbids their

being used as light troops; for from want of habit and exercise, it is certain that they know nothing of those exercises which the Cossacks execute so well.

Austria ought to have something analogous to the Cossacks, not however on a great scale. She should be able to procure easily ten thousand troops of this kind, by forming a corps of five hundred horse in each frontier regiment. I do not understand why, in that country, where everything is arranged with so much care, where the organizations are so judiciously made, (*raisonnées,*) they have not yet attempted anything like this.

France, when she shall have subdued Algeria, will be able, without difficulty, to raise Arab troops, who, in time of war, will render incalculable service. To attain this end demands a constant solicitude on the part of the government; and it would be well, at the present time, to increase, as much as possible, the number of indigenous troops, so as to have a mass of men attached to the glory of our arms; habituated to mingle their interests with ours, to rejoice in our success, and fit to furnish good non-commissioned officers, the need of whom would be more and more felt in proportion as their organization should be extended.

Cavalry being designed for hand to hand fighting, it is asked why more care is not taken to cover the men from the enemy's fire. A very little would suffice to protect them from a sabre stroke, or from a lance, or even to deaden the force of a musket-ball, fired from a distance,

or a pistol shot.* The Orientals, whose combats are always of the nature of mêlées, have at all times taken this precaution; they are often clothed in coats of mail. The breast might be protected by a buff coat, of such stuff as the Castilian peasants wear; for the head, the shako should be reinforced on the inside by two cross pieces of wood, as is commonly practiced; the limbs should be protected by one or two light iron-chain works, placed outside upon the sleeves and the pantaloons. This double cuirass of buff, festooned and adorned, would form an elegant dress, which would bring to mind that of the Roman soldiers. This light and warm dress, — which favors health, by shielding the soldiers from the disagreeable effects of sudden changes of temperature,—might be equally appropriate for the infantry of the line. Were this adopted, the ordinary dress would be a short-skirted loose coat, like that of the cuirassiers; and the buff coat, worn only when under arms, would be the signal for service.

I will add a word, concerning the instruction of cavalry, which has always seemed to me incomplete. Too much importance cannot be attached to skill in horsemanship, (*equitation,*) nor can there be too much care taken, to render the men perfect masters of their horses. The man and his horse must form but a single individual, which shall realize the fabulous Centaurs.

* The author wrote from the experience of a long period, now suddenly passing away under the influence of improvements in fire-arms. Rifled muskets and rifled cannon make all attempts to cover the person of the soldier fruitless. War is proportionally more destructive.

Equitation is everything. It is what subdues the horse and tames him. The manœuvres will always be sufficiently correct, if the soldiers are good horsemen. Encouragements of every kind should be held out to further this object. The troops should be accustomed to charging to the enemy's centre, without being particularly careful to preserve a certain order, incompatible with this impetuosity, which is the best means of beating the enemy; but, at the same time, they should be habituated to rally, at the first signal, with promptness and dexterity. They should be constantly placed in these circumstances, that they may be prepared for them by all necessary means. Thus the apparent disorder of the charge will have no influence upon their morale.

On the other hand, if the charges, while under instruction, be feeble and moderate, they will be less powerful still, when before the enemy, and will never overthrow him; and, at the first disorder, the soldiers will think themselves lost.

There is a usage often practiced at drills, great evolutions, and sham-fights: the cavalry is made to charge upon the infantry; and in consideration of its being only a simulated combat, the cavalry is halted before having reached the infantry, or it escapes through the intervals. Nothing can be worse than this kind of education for the horses; being thus accustomed to avoid the point of attack as an obstacle, they can never be made to come to close quarters, for their habits accord with their instinct, and perhaps with that of their riders. This practice is

pernicious; it should be banished from the drill, and replaced by an entirely different lesson. The war results would be immense. I understand it thus:—

Place a line of infantry opposite a line of cavalry; give such distance between the files in the two lines, that a horse and a man may easily pass between them. The cavalry waver at first, even at a walk, but they pass through the infantry; they try it again and again, many times at a trot and at a gallop, until the horses execute the movement, so to speak, of themselves. The movement is then accompanied with a few musket shots, along the whole line, increased in number as the instruction proceeds; and if it be desired to increase the noise, the infantry files may be formed in six ranks, and the noise of the firing is then equal to that of a whole battalion.

After many days of similar exercise, a cavalry corps will be better fitted than others, not thus instructed, to attack infantry, and the horses, well set up and accustomed to precipitate themselves upon a fire which they have learned to face, will of their own accord carry their riders along, if the latter should be tempted to moderate their ardor.

CHAPTER II.

ARTILLERY.

THE third arm, now become indispensable in war, is artillery. It is of capital importance. But its use depends particularly upon its organization and the principles upon which it is constituted.

I shall try to lay down those principles, and develop their consequences. I will commence with the *materiel;* I will afterwards pass to the means of making the best use of it.

The simplest artillery is the best. If the same calibre could satisfy all wants, and the same carriage serve for all transportation, that would be the perfection of the service.

But this cannot be: artillery is to produce very various effects; these effects being given, the problem is to determine the corresponding calibres, limiting their number to the absolute necessity of the case; for whenever two calibres serve the same purpose, there is one too many, and it is moreover injurious on account of the complication which it produces, in munitions, stores, and substitutions.

Artillery should be divided into three kinds;—1st, siege and sea-coast artillery; 2d, field artillery; 3d, mountain

artillery. In each of these divisions, and, in spite of the difference which necessarily exists in the weight and dimensions of cannon, the same calibres should be adopted, as far as possible, so that the same munitions may be used.

In sieges and in the defence of fortified places, such pieces are needed as will destroy men, dismount the enemy's guns, and carry to a great distance. Experience has demonstrated that the 12-pdr. gun perfectly accomplishes these objects.

In this kind of war, ramparts are also to be destroyed, crumbled away, to open a practicable path by which to penetrate into the place. In this view it is no longer a murderous weapon; it is a utensil, a machine, the battering-ram of the ancients, rendered still more powerful and more expeditious. To produce this effect, the 24-pdr. is absolutely indispensable. The 16-pdr., formerly in use, was superfluous; in the one case insufficient, in the other excessive.

Field artillery is intended to follow the troops in all their movements, and to arrive promptly at a prescribed point, to crush the enemy. To this end we need a light material, of easy transport, and very easy of movement, so that no obstacle of ground can arrest its progress. I should consider a sufficient calibre that of the 6-pdr., in use throughout Europe, and which I caused to be adopted when I was at the head of the French artillery. With this calibre all the wars of the Empire were carried on. We have returned to the 8-pdr.; no doubt its superiority

gives some advantages; but it has the great disadvantage of increasing the munitions one-third in weight, and of thus rendering necessary more considerable means of transportation,—means always lacking in war.

A second object to be accomplished in field wars, is to produce great effects by the aid of powerful reserves; to silence the fire of the works in temporary fortifications, upon which the enemy is resting; to arm such works when constructed by ourselves; to breach walls not properly embanked; to protect the passage of rivers. For these purposes 12-pdrs. are certainly necessary; but not so heavy as those employed in sieges or in the defence of places. In fine, there may properly be in the train of armies one or two batteries of 24-pdrs. short, designed to be fired with charges weaker than a third of the weight of the ball, and which, in a thousand circumstances, will render splendid service on the day of battle.

The calibres, as we have just seen, should then be proportioned to the effects to be produced; and notwithstanding the great number of these, they may be reduced to three, by varying the dimension and weight of the pieces. But this is not all; we also employ hollow projectiles, shells and howitzes; their calibre, as far as possible, should be the same as that of cannon; and this offers no practical difficulty.

Howitzes of 5½ inches diameter, having the same diameter as 24-pdr. balls, are everywhere adopted, with the advantage of serving indifferently in howitzers or guns. A larger calibre has appeared useful for siege

howitzers; and the proper system has been observed, in giving them a diameter of 8 inches, allowing the use of these howitzes in 8-inch mortars, of which great use is made in the attack and defence of fortified places.

Afterwards come the other mortars of greater calibre. Here the larger the calibre, the greater the effect. The expense and the difficulty of transporting munitions are the only arguments against their employment. The mortars, designed to receive a very heavy charge, cast upon a broad plate which supports them, and to which my name was formerly given, as well as those named *à la Villantroy*, are only applicable to the defence of coasts, because of their immense weight, and because they are especially designed to carry to a very great distance, which is useless in sieges and the defence of places.

Further on I will speak of a newly-invented artillery, and it will be seen that the principle of uniformity of calibre has been retained in arms employed for different purposes.

The calibres of which I have just spoken are then the only ones which are necessary for use in sieges and for field service.

There now remains the artillery useful in mountainous warfare. Without entering into details, I will say that it should be composed of pieces sufficiently light to be carried on the backs of mules: larger pieces, such as are transported on sledge-carriages, are more embarrassing than useful. *Congreve rockets* are also eminently fitted

to be employed in the mountains. I will speak presently of this invention.

There is still to be mentioned an arm from which may be obtained great results; these are wall or rampart guns, only lately invented, which load at the breech, and throw a ball weighing several ounces, with very great precision of aim, and with a range similar to that of pieces of small calibre. These guns, distributed to the number of ten or twelve to a regiment, and carried habitually with their ammunition, upon a single carriage, would be, on occasion, of extreme utility.

After having spoken of the calibre of cannon, and the motives which induce a choice, it will be proper to say one word of the other dimensions and the weight of pieces. The determination of these is not arbitrary; it springs from positive circumstances, which have a direct influence upon their utility.

The length of a cannon is relative to the charge to be used. We do not confine ourselves to the precise limit which experiments have demonstrated as that which will give the greatest range. To avoid other disadvantages, this limit has not been regarded as absolute; but we approach it as nearly as possible. The gas formed by the combustion of the powder, and the explosion of which produces the force which impels the ball, acts as a resisting force.

Now to the extent to which it acts upon the ball when in motion, it augments the force which follows it, and, consequently, the range: this action is the result of the

combustion. If the combustion be not finished when the ball has left the piece, there is a diminution of the range; if it be prematurely finished, and the ball receives the entire impulsion from it before having passed through the length of the piece, there is also a diminution of range; but in the latter case it is the friction which occasions it. The quantity of powder should be such that the expansion of the gas which it produces in burning, shall accompany the ball, from the bottom of the piece to the muzzle of the piece, no more nor less; and so, with long pieces, there must be stronger charges, and, with short pieces, weaker charges.

In France there has been adopted, for cannon, a uniform charge, represented by the third of the weight of the ball. With this condition a series of experiments has been made, to determine the length which will give the greatest ranges; and pieces, thirty-five calibres in length, have been cast.

After having verified the range thus obtained, the piece has been sawed off at the chase, so as to diminish its length one calibre; the range is then greater. The operation is renewed, and the result has always been the same, until a length of twenty-seven calibres is reached; passing this limit, to twenty-six calibres, the range has been found to be in a diminishing scale. It is then properly concluded that with a cannon of *twenty-seven* calibres in length, and a charge of one-third the weight of the ball, the maximum of range is obtained.

But it is difficult to manœuvre pieces of this length;

and, to remain within medium limits, there has been adopted for siege and place guns, a length of twenty-two calibres. For field-pieces, which require a still easier and prompter manœuvre, this length has been reduced to eighteen calibres, and some foreign nations have fixed it at fourteen.

I do not speak of howitzers: this is a particular arm designed for firing in ricochet, established upon other principles, and must satisfy other conditions.

I will now make a remark, founded upon a well-authenticated fact, the application of which is important, and which seems astonishing. The powder should burn rapidly, but not instantaneously; otherwise the force of inertia would cause a violent shock, which would destroy the arm itself. Its action should be successive; a special fact has given me the means of acquainting myself with this phenomenon.

General Rutti, an officer of great merit, placed at the head of the government works of powder and saltpetre, had succeeded in making powders of extraordinary strength; and he thought he had obtained a most important result. Five hundred thousand pounds of this kind of powder had already been made, and it was thought desirable to reserve it as a precious thing for the uses of war. An official circumstance happily changed this design. The new powder was issued to be used at the drills of the guard, in 1828. In two schools of practice, all the cannon were burst and rendered unserviceable. These facts being established, I sought for their cause: there

was no other explanation than that which I have given. It is a verification of the adage:—"*Better* is the enemy of *well.*"*

As to the weight of pieces, it may be diminished in a very considerable manner, and without disadvantage as respects the resistance; but the carriages suffer greatly, and are easily broken. The force of the recoil, spending itself upon too light a mass, produces a sudden and destructive shock. After a certain limit, a pound of metal taken away from the weight of the piece should be added to the carriage which supports it.

That fact will be made clear by the following example, which every one may have daily before his eyes. A juggler will place upon his chest a stone of great weight, and he will brave the effect of a blow from a war-club, whilst, with a stone of less weight, he would be injured by it.

In 1802 and in 1803, when I was working to establish the new system of artillery, which was afterwards used during the entire period of the Empire, the experiments which I directed, upon the weight of metal, demonstrated that the proportion which equally satisfies the conditions of mobility and preservation, is *one hundred and twenty* pounds for every pound in the weight of the ball, provided the charge be one-third the weight of the ball.

The English attach great importance to the lightness of guns for horse artillery. They do not give, or, at least

* "Le mieux est l'ennemi du bien" or, in our own homely adage,—"Let well enough alone."

they did not give, thirty years since, more than *ninety pounds* for every pound in the weight of the ball; but it must also be observed that they reduced the charge to a quarter, instead of a third.

One word more concerning the *materiel.* Carriages of various kinds are necessary elements of the artillery service: use injures them, destroys them, and new ones are constantly necessary to replace them. Hence the great advantage of a perfectly uniform construction. De Gribauval, first inspector general of artillery, author of the first regular system, claims the glory of having established this uniformity. Thus, the fragments of a carriage, constructed at Auxonne or at Toulouse, could be used to repair a similar carriage made at Strasbourg. But subjected to the influence of officers of artificers,* their pedantry has led them to adopt, in construction, fruitless divisions and subdivisions, and thus in a systematic manner great embarrassments have resulted, almost equivalent indeed to the confusion from which we had just emerged.

To give an idea of this, I will only cite one single fact which has remained in my memory. There were, as well as I now remember, twenty-two kinds of wheels in his system of artillery. I reduced them, in the system of 1803, to ten. At the present time we have come down to four or five; and I believe that this kind of *materiel* has

* *Officiers d'ouvriers* (*d'artillerie.*) There are in the French service military artificers—*ouvriers*—whose duty it is to construct all kinds of military carriages, implements and machines.

never reached the same perfection. In the next war fifty cannon well commanded will produce more effect than one hundred, such as they formerly were.*

In my encomiums upon the new artillery, I only except the 8-pdrs., which has been resumed, and the exaggerated weight of field-pieces, recently fixed at *one hundred and fifty* pounds for every pound in the weight of the ball.

But the best *materiel* in the world will be of only moderate effect, if it is not in the hands of men capable of producing, with it, its greatest results; and as remarkable as had always been, in France, the instruction of the corps of artillery, there were many things wanting: its organization was very imperfect.

The signal disadvantages have been successively remedied, and now all the conditions for producing the best service seem to have been satisfied.

The unit for battle, in the artillery, is the **battery.** It is composed of six or eight pieces, always marching together, with their munitions, and placed under the same command. It is to the artillery what the battalion is to the infantry, and the squadron to the cavalry. This corps should then be homogeneous and compact; the elements which compose it should have the same spirit, and the habit of being together.

Now, there are three distinct elements: the *materiel* or

* Marshal Valée, formerly central inspector of artillery under the restoration, is the author of that splendid system of artillery in *personnel* and *materiel* now adopted in France.—M.

arm properly so called, those who use it, and those who transport it. If these elements do not agree, the artillery is imperfect.

The first merit of artillery — after the courage of the gunners and the exactness of their aim — is its mobility. It is thus seen how important is the management of the horses provided to draw the cannon.

In earlier times everything was divided; the guns remained at the arsenal or in the park, until the moment of fighting; the horses belonged to a contractor, and the drivers were his servants, treated without consideration, having no prospect of promotion, and called by the name of *artillery drivers*. We made all the campaigns of the Republic with this monstrous organization.

Under the Consulate and during the Empire, this service was ennobled, and the corps of artillery drivers (*corps du train*) was formed with its non-commissioned officers and officers. There was thus a prospect of promotion, and the name of *driver* was replaced by that of *soldier of the train*. My influence was direct upon this organization, which was indeed, in great part, my own work; and to the end that the rights of different grades should not clash as to command, I was careful to give to officers of the train only grades inferior to the corresponding grades in the artillery corps.

In this manner was prevented — which is indispensable — all embarrassment and conflict in the relations between the commanders of batteries and those who conduct them. As to the latter, for lack of sufficient instruction,

never being designed to exercise higher authority, this difference in the grades will always keep them, naturally situated, acccording to the order of military rank, in a station of obedience. This organization lasted during the entire time of the Empire. At the end of the restoration, the council of war of which I was one of the vice-presidents under M. le Dauphin, changed the organization of the corps of artillery. They divided it into batteries, having their *materiel*, their cannon and horses, conducted by cannoneers of the second class, who are at the same time instructed in manœuvring and serving the cannon, and who are called *cannoneer-drivers*. This organization has certainly attained to perfection.

There have been created, within a few years, two kinds of artillery, the effects of which, in my judgment, are wonderful, if their use can be fully developed in the next war: **Congreve rockets** for field service, and cannon called **Paixhan**, for the defence of coasts and cities. I firmly believe that the power of resistance of fortified places will be increased by their use. The mode of warfare and the organization of armies will experience also a great modification. But these two objects deserve a more particular development.

The part played by artillery in war, has daily acquired more importance by reason not only of its increase, but also of its great mobility, which permits an almost infinite combination of movements. Nevertheless, there are limits to this mobility, which gives us the means of assembling

upon a given point a great mass of artillery. The number of guns proper for a given war is equally limited, by reason of the expense and the embarrassment of transporting a surplus of *materiel*, such an embarrassment indeed as might, in marches, more than counterbalance, in disadvantages, the advantages which might be expected of them at the moment of action.

Experience has demonstrated that the maximum should be four pieces for a thousand men, a proportion moreover which will be soon found to have been exceeded, after a few months of campaign; for the *materiel* is not subjected to the same causes of diminution as the infantry and cavalry, and the *personnel* of the artillery, so small in numbers, is always easily maintained complete.

But the **Congreve rockets**, which have progressively been brought to great perfection, and are now discharged with sufficient precision of aim, form a kind of artillery, which may become a principal arm, by the development of which it is susceptible in its application.

Indeed, when the arm is composed solely of the projectiles which are employed; when no machine is necessary to discharge them, and when they do not present to the enemy's fire any surface upon which to draw his discharges; when finally, by very simple dispositions, there may be given to this fire a development so great that the front of a single regiment may be subjected to a rain-storm of balls, representing the fire of a battery of one hundred cannon; then the means of destruction are such that there is no struggle possible, in following the rules

and the principles which the present art of war has established.

The following is my conception of the employment of Congreve rockets:—I would cause, in each regiment, five or six hundred men to be instructed for the service of this new arm. Two wagons would suffice to carry one hundred frames, (*chevalets,*) such as the Austrians have adopted; and at a given order, these hundred frames, each served by three or four men, would deploy a fire of which we can scarcely form an idea.

To such a fire as this, could masses be opposed, even of troops in battle array, upon many parallel lines? Assuredly not. Now, the advantage in battle consists in making the enemy fall back; we must then march upon him, cross the space which separates us; and to do it with the least danger possible, we should employ the arm which may be carried most rapidly over this space. On this account cavalry is the best; and this cavalry itself will be subjected to a new kind of manœuvre, so that it may present itself to the fire of the enemy with the fewest chances of destruction. Thus it should be dispersed as skirmishers, ready however to reunite at a given signal, to prepare itself for the shock which must follow the completed charge. Then the infantry changes its function: it becomes the auxiliary of the Congreve rockets, or rather of the rockets now become its own weapon, the muskets being for the time only accessories.

In this new system, infantry has need of an entirely dif-

ferent instruction. It should be divided into two parts: the first armed with the rockets; the second designed to place them upon the frames, to serve them at the rallying point, at the moment when they shall come in immediate contact with the enemy. Then the proportion of the arms (infantry and cavalry) must be changed. There should be more cavalry and less infantry; a cavalry drilled in an entirely peculiar manner, and an *infantry-artillery*, if I may thus express myself, the functions of which should be limited to serving the rockets, to carrying them and aiming them, to the occupation of entrenched posts, to the defences of fortified places, and to mountainous warfare.

But this new artillery acquires great importance in a thousand circumstances where cannon can play no part whatever. In the mountains, we transport, at the present time, with great difficulty, a small number of pieces which can there be of little effect. With rockets, we have an arm of long range, which may be established everywhere in profusion, upon rocky-summits, as well as upon lower plateaux. On level plains every building is transformed into a fortress, and the roof of a village church becomes, at will, the platform of a formidable battery. In a word, this invention, such as it is, and with the perfection to which it may yet be carried, is applicable to all conditions, bends to all circumstances, to all combinations, and must assume an immense ascendency over the destiny of the world.

Served by a special corps, considered purely as artil-

lery, the rockets would be necessarily rare, and could produce but little effect. But an immense development is the only useful manner of employing them, the only means of astounding, of overpowering, of overthrowing as with a thunderbolt: they must therefore become the weapon of the army, properly so called.

We reflect only little by little upon the nature of things. We act for a long time by routine, without concerning ourselves with possible modifications and ameliorations; thus it will only be with time that we shall be able to appreciate the power of Congreve rockets. But if, in the next war, a skilful and calculating general should have a glimpse of the question in all its developments, in all its consequences; if he should prepare his means in silence, to display them upon the field of battle, he would obtain a success which would defy resistance, until the enemy should avail himself of the same means. At the moment of this grand experiment, the personal genius of the commander would attain a great ascendency over the fortune of the war.

Nevertheless, as rational and plausible as the result which I predict may be, experiment alone will establish, in an incontestible manner, the merit of this new invention.* The wise man can only have absolute conviction, after facts have realized his hopes, as there are so many

* The Congreve (war) rocket was only invented in 1804, when Sir William Congreve changed the paper case for one of iron, and armed its head with a shot or shell, thus making what before was a pyrotechnic toy, or, at best, a signal light, a destructive weapon of war.

unforeseen circumstances which modify the best founded calculations, the most seducing probabilities.

However, such are the appearances, that a skilful and enlightened general ought in the very next war to prepare for using this new arm, and for astounding the enemy by its effects. If he alone uses it, he will probably be master of the campaign; and, if his adversary has been as vigilant as he, he will at least secure himself against a defeat. But his foresight must embrace all the consequences of this new means, relatively to the other arms, to their proper proportions, to their manœuvres, and to the manner of using them.

After the successful employment of Congreve rockets in a campaign, it is evident that they would be adopted in all armies; then the equilibrium would be re-established, and there would no longer be an exclusive advantage for either side. But the art of war would, by their use, be powerfully modified. The most vigorous combats, and those producing the greatest moral results, would render battles shorter, would diminish the effusion of blood: for that which gives victory is not the number of men killed, but the number frightened.*

I repeat it, Congreve rockets must produce a revolution in the art of war; and they will assure success and glory to the genius who shall have been the first to comprehend their importance, and to develop all the advantage which may spring from their use.

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* "—car, nous n'avons tous qu'une certaine dose de courage, qui s'évanouit à l'aspect des dangers renaissants."—*Rogniat*, p. 206.

I come now to the consideration of **Paixhan artillery.***

The heavy artillery, to serve its purpose, should have a great range, and the projectiles which it throws a great momentum. Now to obtain this momentum, one of two things is necessary; either the velocity must be very great with a moderate mass, or the mass must be great with a less velocity; for the momentum of a body is equal to the mass multiplied into the velocity.

Up to the present time, the smaller mass, with considerable velocity, has been preferred, on account of the difficulty of transporting heavy projectiles; but if this has been right with respect to sieges, where the transportation is to be made in short and definite times, it has been wrong under other circumstances which allow an unlimited time, or which permit easy transportation, whatever be the weight. In a word, for the defence of fortified places, for the armament of sea-coasts, and for the naval service, this artillery possesses immense advantages, which I proceed succinctly to analyze.

1. The resistance of the air to the motion of the body being proportional to the square of the velocity, it is less with these heavy projectiles; and, therefore, the range and the accuracy of aim are greater. Supposing a velocity of twelve hundred feet in a second, with the ordinary ball, and of four hundred with the Paixhan ball, the resistance of the air would be :: 9 : 1.

2. The momentum of a twenty-four pound ball, with a

* The Paixhan gun, named after the inventor, is a large howitzer throwing very large balls and shells.

velocity of twelve hundred feet, will be represented by the number 28.808, while that of a Paixhan ball, of twelve-inch calibre, or weighing one hundred and forty pounds, with a velocity of four hundred feet, would be expressed by 56.000; that is, it would be nearly double. That of a thirty-six pounder, with the same velocity of twelve hundred feet, would be 43.000, and thus in proportion more and more feeble.

3. The destructive force being in the ratio of the surfaces, *i.e.* to the squares of the diameters, the proportion here will be as 1 to 4.

4. Finally, the thirty-six pound ball will pass through the epaulment* of a land battery, or the sides of a vessel, or it will bury itself in their thickness. It matters not where it lodges, it will produce no damage: and if it passes through the planking, the hole which it makes is easily stopped up; but a Paixhan ball produces far greater ravages. First of all by its great diameter and the slowness of its motion, with equal momentum, the effect being in the inverse ratio of the velocity, it demolishes a greater surface; then in striking it makes an immense breach: if it is a battery which it has struck, it must be reconstructed; if a vessel, she goes to the bottom, without a chance of saving her.

To defend a fortified place by such means, elevates the defence almost to the character of an attack; and the employment of this arm against ships at sea, would

* Any elevation of earth, thrown up to cover troops, is so called; but in this connection an *epaulment* is the parapet of a battery.

make squadrons disappear, and great vessels especially. Indeed, the superiority of a ship-of-the-line over a vessel of inferior size has two causes: the former carries a battery which the armament of the frigate cannot resist, and the frigate has a battery the calibre of which is insufficient to injure the ship-of-the-line. Therefore a frigate is not in condition to sustain the slightest struggle with a ship-of-the-line, because the fire of the frigate is only dangerous to the crew and the rigging, while the fire of the ship-of-the-line is destructive besides to the vessel itself, and may in a moment engulf it in the bottom of the sea.

But when the day shall come in which a small vessel, either with steam or sails, and with a small force, shall be provided with one or two guns, a single ball of which would suffice to destroy the largest vessels,—then ten small craft, each armed with two heavy guns, must quickly put an end to any ship which they surround. Ships which cost more than fifteen hundred thousand francs ($300,000) offer, in such a case, no guarantee of permanence and good effects. The Paixhan artillery is then the destruction of the navy as at present constituted.*

During the period of the restoration, Lieutenant-Colonel Paixhans, an officer of great distinction, conceived the idea of proposing this artillery. Louis XVIII. appointed, to examine it, a commission of generals and naval officers of the highest rank, of which he made me the president.

* These principles are recognized and carried out in our gunboat flotilla.

Experiments were, however, necessary to determine the range, the greatest accuracy of aim, and the means of easily manœuvring this piece. The experiments made at Brest succeeded perfectly, and surpassed the expectations of the author. Hence we should adopt, in artillery, the changes which produce immense modifications in naval warfare by rendering large ships unnecessary; in the defence of coasts, thus rendered easier and surer; in the defence of fortified places, which may thus be, it seems, much prolonged. But the adoption of this new arm should not cause us to dispense with the use of hollow shot, fired from thirty-six and twenty-four pounder guns; since the effects of these, although less powerful, are always formidable to the enemy, and favorable to defence.

CHAPTER III.

FORTIFICATIONS.

It would not comport with the spirit of the present work to treat in detail of fortifications, and it would probably be beyond my powers. I shall consider then simply the needs of war, and the aim which is proposed in erecting fortifications, leaving aside all that concerns the engineer's art.

In earlier times, strongholds formed themselves, so to speak. In periods of anarchy, of disorder and internal wars, a picture of which is offered by the middle ages, numerous populations, condensed and rich, desired to place themselves in a condition of safety. They were fortified by surrounding them with a rampart. They were armed. Means of attack being yet in their infancy, they were thus sheltered from all offensive attempts.

But the invention of artillery, and the perfection which that art has attained, soon changed such a condition of things. For the old strongholds, valueless against regular means of attack, it has been necessary to substitute fortified places, constructed carefully and at the expense of the state. And as they could not all be fortified, governments have interposed to make choice of the towns which, by their importance, and particularly by their posi-

tion, demanded most care and protection. The question has then been considered no longer in respect to the special interest of towns, but particularly to the defence of the country against a foreign enemy. Often, however, the choice seems to have been made at random, and without sufficient motives for the preference.

All great questions ought to be resolved upon principle. The first thing is to recognize the aim and to point it out. Then the means of attaining it will present themselves to the mind: otherwise we are moving blindly.

Here, the resolutions arrived at have been modified by private interests and personal influence; and, it may be added, by the system of war established in the epoch of Louis XIV., which rested upon many errors.

Certainly no one has a greater respect for Vauban* than myself; but he was more of an engineer than a general; and, constructing many fortifications, he gave himself up complaisantly to works in accordance with his own taste.

He must therefore be lavish of fortified towns. One thing, however, astonishes me in a genius of this nature: it is that, on an open frontier like that of Flanders, he

* Sebastian le Prestre, Seigneur de Vauban, Marshal of France, born 1633; the greatest military engineer of his age and country. He was the perfecter of the bastioned front; and is said to have fortified three hundred old citadels, erected thirty-three new ones, to have had the management of fifty-three sieges, and been present at one hundred and forty-three engagements. He left various important works on Fortifications.

had conceived the idea of creating a material barrier of great value, by means of a system of fortified places arranged like the squares of a chess-board, (*en échiquier.*)

Nothing could be better than such a system for a small country like Holland, the defence of which is in great measure based upon natural circumstances, turned to profit by art; short distances, and fortresses which control vast inundations, forming great obstacles, add to the means of an army, and facilitate its manœuvres.

But to imitate this system upon an open frontier was an error which a genius of the order of Vauban's should not commit. If he was not forced to bend to the exigencies of a superior command, he yielded in his character as engineer, to the attraction and the mania of constructions.

The changes which have taken place in the manner of making war, and especially in the strength of armies placed in the field, have demonstrated the vice of such a system of defence; and the idea of reproducing such works would not enter now into any military head.

The received principles establish two kinds of fortified places;—depot fortresses and forts of manœuvre.

The first are large, very strong, and few. One on a frontier is sufficient.

They should contain *materiel* sufficient for the needs of a large army which assembles there, in artillery equipage, in spare fire-arms, and in munitions of every kind. They should have numerous work-shops, an arsenal of construction, and, at all times, the *materiel* of a great hospital,

and subsistence stores. In a word, the regiments sent to this place must be enabled to leave it organized and armed, and ready at once to take the field and fight.

Later, the reinforcements, and recruits to fill vacancies, of which the army is in need, are organized in such places; and if the commencement of the war have been unfortunate, or if the army, inferior to that of the enemy, should be reduced from the first to the defensive, its strength would be doubled by falling back upon such a place, situated, by preference, upon a navigable river, to facilitate the arrival of stores of every kind. A depot fortress also favors the manœuvres of an army which is operating in its vicinity, and gives, at the same time, great strength to its base of operations.

We have in France three places of this kind, wonderfully situated,—Strasburg, Metz, and Lille; for the frontiers of Germany, Ardennes and Flanders.

In the days of our grandeur, we had in Italy, according to the space, three places in echelons which assured us the possession of that country,—Alexandria, Mantua, and Venice. Had our prosperity lasted, it is probable that another stronghold of great importance would have been constructed on the Save. In newly-conquered countries, such places are not only depots for the defence of the frontier, they are also places of sway over the surrounding territory.

After the depot fortresses, come the forts of manœuvre. These are useful in facilitating the movements of armies, and in thwarting or hindering those of the enemy.

They should be exclusively situated, either on rivers, of which they occupy both banks, or upon mountains the valleys of which they enclose.

A chain of mountains presents great obstacles to the movements of an army. The roads which cross it can alone give passage to a considerable *materiel.* It is therefore useful to close the points of issue by a fortress, in such a manner as to hinder an attacking enemy from profiting by them, and reserving to ourselves the power to use them.

A river forms the line of defence for an army; the enemy makes his arrangements to cross it; he must create the means of passage, for he does not possess permanent bridges. The army placed upon the defensive can, on the contrary, manœuvre with security upon both banks, and bring all its forces against one part of those of the enemy, when they are divided. If it succeeds in beating the troops which have remained in rear, and which have not yet crossed the river, it delivers those who have crossed to the fatal chances which are presented by an isolated situation and broken communications. In general, the most efficacious method, for an energetic defence, consists in offensive movements restrained, well calculated, executed rapidly and fitly.

I will make this the limit of the general ideas which should preside in the defence of a frontier. As to the details of construction, I will only say that, considering the movements of artillery, and the facilities of transportation, there is an object which cannot be too strongly

recommended to the consideration of engineers, viz.,—to prepare shelters sufficient and perfectly secure for stores of every kind, and for a considerable part of the *personnel* of the garrison; otherwise the defence is not possible.

Strongholds should, besides, occupy great spaces, by means of detached works systematically placed, and so strong that each one will be able to defend itself. The general defence will thus be rendered easier, the attack will be more embarrassed, and the resistance much longer. This kind of fortification had received a fine application at Alessandria in Piedmont; and, if political events had permitted it to be used, that place would have rendered great service. But afterwards, its considerable extent requiring a large garrison, and the Piedmontese army being of moderate numerical strength, the King of Sardinia could not, with propriety, preserve it. It has therefore been destroyed, and is reduced, at the present time, to the citadel alone.

I have explained, in another place, the design of strongholds and the conditions which should determine their construction, and the choice of their location. I will now speak of those fortifications the object of which is to cover an inferior army against a superior one, and to give to it power to resist, in spite of the disproportion of force: in a word, **entrenched camps,** designed to establish a kind of equilibrium between unequal forces.

Entrenched camps are of two kinds. The first are composed of a continuous line, which creates material

obstacles along the entire development of the position occupied by an army; the others consist of a determined number of points fortified with care, rendered, if possible, strong enough to be under no apprehension from a sudden attack, (*coup-de-main.*) Being able to resist a powerful attack, they serve also as supports for troops, protect their flanks, cover a part of their front, render them impregnable, without in any way restricting the liberty of their movements.

The first kind have scarcely ever accomplished good results. Attacked seriously, they have almost always been forced. This result may be attributed to two causes.

First, the troops, obliged to guard the entire development, are too much divided; a single point gained by the enemy often suffices to cause the evacuation of all the others. Second, the entrenched army always regards itself as inferior, and this opinion robs it of one-half its strength. If a point is forced, it gives up the thought of resistance, although this is the very moment when it is most sure of conquering; for it has necessarily superior forces to the enemy, who has as yet been only able to penetrate with the head of a column, and whose troops, following the first, can only arrive slowly, and by passing through defiles. And so it is, that while cheap and easy success belongs to the entrenched force, it thinks only of retreat.

The examples in illustration of this are numerous. It would be easy for me to cite many, but I will content my-

self with mentioning three celebrated ones, the last of which took place under my own eyes.

The first is the storming of the lines of Turin, defended by an army of 80,000 men, attacked by Prince Eugene of Savoy* with 40,000 Austrians.

The second was offered at Denain, where Marshal Villars,† with a disheartened and inferior army, beat Prince Eugene.

The third is the taking of the lines of Mayence, defended by a French army of 30,000 men, and composed of works of rare perfection, the most considerable of their kind which have been built in modern times. Constructed under the direction of General Chasseloup-Laubat, one of the best engineers France has ever had, these works seemed impregnable. Nevertheless, on the 8th of October, 1795, two detachments were sufficient to give rise to a disorder which nothing could repair; the one of four hundred men, crossing the Rhine in rear and above, the other which coming up through a narrow space, left between the river and the lines, at the moment when numerous troops were arranged for an attack in front.

* The fifth son of Eugene Maurice, Duke of Savoy-Carignan, born at Paris, 1663. Entered the Austrian service, 1683. Served as a volunteer against the Turks; created Lieutenant Field Marshal, 1687. Defeated the Turks at Zenta, September 11, 1697. Surprised and defeated Villeroi near Cremona. Aided Marlborough in the victory of Hochstädt, (Blenheim,) August 13, 1704. Took Belgrade, 1717.

† Louis Hector de Villars, born at Lyons, 1653. Served in the army of Louis XIV. Created Maréchal de Camp, 1690. Defeated the Austrians at Denain, 1712, and forced Prince Eugene to raise the siege of Landrécy.

The only reasonable use which can be made of **parallel lines,** is to employ them against very large but poor armies,—against Eastern troops. Their utility in such cases has always been demonstrated and acknowledged; the success obtained by Prince Eugene of Savoy before Belgrade, is an additional proof of it. Placed between the lines of circumvallation erected against the garrison of the fortress and the lines of countervallation facing the army of the Grand Vizier, he was able to continue the siege, hold the army in check, capture the place, and come out of the struggle victorious; but, against European armies, other principles must be followed.

When a soldier is authorized to place his entire safety in a material obstacle which is before him, that obstacle being overcome, he thinks no longer of defence, and this fatal impression is often communicated to persons of high grade. A soldier should, on the contrary, be convinced — and he cannot too often be reminded of it — that the guarantee of victory lies chiefly in his courage, and that he ought to scorn the enemy. But if, instead of obstacles which paralyze his movements, he has only supports which cover and protect his flanks, he will consider himself invincible, and this opinion will soon be shared by his enemy; then if he resists an attack, free to move in any direction, he will have the power to profit by a victory, and to develop its consequences.

An army in presence of another army stronger than itself, and in definitive circumstances, will do well to entrench itself. Resting upon a fort, a river, or mount-

ains, and environed by a greater or less number of defensive points rendered as strong as possible, it will succeed in supplying the want of numbers, and in establishing a sort of equilibrium.

The subject leads me naturally to the question of permanent entrenched camps; newly established, composed of revetted works, embracing a large space, situated on strategic points, and traversed by a great river. Nothing, in my judgment, is of more value, or can be of greater service. Many establishments of this kind, although constructed upon very different scales, and on conditions by no means the same, are now in process of erection or have been erected within a recent period. I will mention two principal ones which have attracted the most attention—that of Lintz, in Upper Austria, and the fortifications of Paris.

The entrenched camp of Lintz is composed of forty-two towers, carefully constructed; they occupy a circular space of more than six leagues; each one of these towers is casemated,* covered, on the side toward the open country, by the relief of a *glacis*,† and it has an entirely sweeping fire. The model tower had a deep ditch, with a revetted counter-scarp, and a counter-scarp gallery for reverse fire; and it was very wrong, I think, that these means of security were suppressed in the system. The

* A casemate is a bomb-proof chamber or vault in a fort, through an opening in which—usually in the scarp wall—cannon are fired.

† The outer slope of the ground, beyond the ditch, towards the open country.

armament of each tower is composed of a dozen pieces of large calibre. The towers are placed in sight of each other, and near enough to support each other. They occupy, in a portion of their development, a succession of heights, connected at some distance with rugged and difficult mountains, and they abut and support themselves upon the right bank of the Danube, some distance above the town. On the left bank, a greater height, buttressed upon the upper Danube, (Pöstlingberg,) is occupied by a proper and sufficiently strong work; from which extends another line of towers, embracing a large space, and coming in the same manner to rest upon the Danube, below the town.

I will not here discuss the strength of isolated towers; I think them but little capable of resistance, when abandoned to themselves. But, covering an army, which is enclosed in the space embraced by them, they seem to me to be impregnable. Never could the enemy undertake to besiege them, sustained as they are by the army, and never would an army placed under their protection, have anything to fear.

The fundamental principle of entrenched camps of this kind is, that they cannot be blockaded, and that they are placed at the meeting point of numerous communications. With this in view the camp of Lintz is in proper position, its strategic position is well chosen. Two roads, one on each bank of the Danube, go down the river at greater or less distance from its borders Many roads lead into Bohemia; others are directed toward Salzburg, the Tyrol,

Styria and Carinthia. A camp as large as that of Lintz, with the obstacles which the country presents, cannot be surrounded by the enemy; and the army which is there enclosed can never lose all its communications, unless we suppose that the forces in its front are at least triple its own. It will then be always able to receive reinforcements, and be reorganized, until the moment when it may think proper to assume the offensive: the enemy will thus be forced to remain in observation; for never would he dare to risk himself in the narrow valley of the Danube, and to march upon Vienna, leaving the Austrian army in that offensive and menacing position.

Indeed such a resolution would be foolish in the extreme; and if, in 1809, the camp of Lintz had existed, Napoleon would not have gone to Vienna, or would have entered it much later than he did. In war, and especially for great monarchies, time is everything, since it is only necessary to give the natural resources of a country the means of developing. The entrenched camp of Lintz was then a good and great military conception.

There are in every country localities which would aid analogous establishments, and which would, upon occasion, be of great utility.

The entrenched camp of Verona was constructed in the same spirit; and, although there may be very different conditions, it can and must play an important part, in the hands of a general who will be able to make use of it in his manœuvres.

I come now to the defensive works erected at Paris,

which have been, and still are, objects of such great and solemn debates. The construction of the forts, the system of which seems to me perfectly conceived, is a greater assurance of the independence of France against the attacks of entire Europe, than the acquisition of many provinces, which would have in that proportion removed the frontier to a greater distance.

No one will deny the immense influence exerted by Paris upon the destinies of the kingdom. A head out of proportion to the body, but a living centre, where are assembled faculties and intelligence, where an irresistible moral power is developed, where immense treasures are accumulated, and where is found in reunion all that the country has most distinguished, Paris has accomplished wonders for the power, the glory and the brilliancy of France. But that city caused it to purchase this advantage at a dear rate, by the weight with which it crushed the country when it fell. Interests which touch the whole kingdom, and compromise its very existence, cannot be abandoned to the hazard of two or three battles: either the frontiers must be removed, or the dangers which the enemy's approach causes it to risk should be diminished; and there was no other means but to prepare an impregnable refuge for the French armies, unfortunate and beaten, by reuniting them under her walls.

Whatever might be the consequences of the most disastrous campaign, 80,000 or 100,000 men of the fragments will always constitute the remains of an army; and resting against forts regularly constructed, these 80,000 men

will be unconquerable. Now, with the resources which Paris contains in *personnel* of every kind, in *materiel* of every sort, and with the aids of the neighboring departments, the skeletons would soon be filled up, the losses repaired; and in less than one month an army of 300,000 men, well provided, and renewed as to its *morale*, would be ready to march against the enemy. What force then would not the enemy require to resist? If he divides his forces he will be feeble in all parts and easily destroyed; if he holds together to resist and to fight, how can he support himself? And what would be his fate after the smallest check?

If then the enemy should advance upon Paris, there would be nothing better for him to do than to leave it again, before the French army, reorganized, should be able to go and find him there; he would be obliged to hasten to establish the war in the provinces, and within reach of his resources. In that case the war is carried back to the frontiers, and everything returning into its natural condition, a catastrophe is no longer to be feared.

I regard, then, as a most useful event to the safety and to the defence of France, the construction of detached forts, the development of which is such that the enemy cannot present himself in force upon many points at once. But it was not necessary to fortify Paris by a continuous fortification; for in my judgment and in that of men of education and experience, this city is not in condition to sustain a siege; it was sufficient to adopt such a system

of defence that it can never be besieged; and, to this end, the only end which should have been considered, the forts were sufficient; the continuous line is superfluous; and whatever may happen it can never have a useful application.

11

CHAPTER IV.

ADMINISTRATION.

MEN brought together in large numbers have wants; the talent to satisfy these with order, economy, and intelligence, forms the **science of administration.**

The basis of a good administration is in the care taken to acknowledge the reality of consumption, (*legitimité des consommations.*) Where the reviews are exact, where the effective force and those present under arms are determined in a precise manner and frequently, there are elements of order: for great abuses are found less in the prices of things consumed, than in the consumptions which have never taken place, but are only conjectured.

In the time of the Directory, the French military administration was in great confusion; and the First Consul, upon his accession to power, made haste to create a new corps, charged with revisions, for the establishment of order.

He determined to give it great consideration, which was justified by great zeal. At the end of six months, more than 150,000 men, who were not in existence, but for the greater number of whom rations, pay and clothing were drawn, were stricken from the rolls.

The systems of administration are different according

to countries: all are susceptible of good results, whenever the effective force, and those present under arms are exactly determined. I will only observe that there are, in my opinion at least, great advantages in giving to various corps the faculty of administering for themselves as far as possible; for as the excellence of troops is always connected with good administration, a great responsibility should be imposed on the commanders of bodies of troops, and they should also be invested with great powers; their operations should be scrutinized, but the direction of them should be left to their discretion. The sole responsibility of judgment concerning the soldiers is itself a great guarantee that they will be zealous. The colonels who are found to prevaricate should be punished in an exemplary manner; but, on the other hand, the glory of the successes they obtain should be conceded to them.

It has been forbidden in France to form, in the various corps, economical clubs, (*masses d'économie,*) and a great error has thus been committed. A community of living is always of advantage, and a skilful and intelligent commander, without depriving the soldiers of the enjoyment of any of their rights, can and ought to make them thus economize. If forbidden, they are none the less formed, and not being avowed, they are often put to a mysterious and culpable use. When, on the contrary, they are not only authorized, but also directed, and left to the disposition of the commander, to be used for the benefit of the regiment, in accidental cases and those beyond the prevision of the regulations, there will be great encour-

agement, and the colonels will be honored by the success of an industry, the honorable fruits of which they will reap.

Two very important branches of administration are defective in almost all the armies of Europe: these are **hospitals and provisions.*** An enlightened government ought to seek to establish both upon a new basis; important and direct benefits to the art of war, and for the welfare and preservation of the soldiers, would result from it. I will begin with provisions.

SECTION FIRST.

PROVISIONS.

In treating of the **victualling** of troops, I shall only speak of the furnishing of bread; it, alone, presents difficulties, the provision of cattle being always within reach of the consumers.

The difficulty of distributing bread regularly to the troops, is one of the most embarrassing things in war. It is inexplicable that so many distinguished generals, who, from this cause, have been thwarted and fettered in the execution of their projects, should not have arrived at the solution of so important a problem.

The Romans had solved it; but, in general, their wars

* Called in our service *subsistence stores:* the officers charged with providing them are called *commissaries of subsistence.*

did not require as rapid movements as those of modern wars.

There is, I believe, a perfectly satisfactory manner of conquering this difficulty, and the change which I propose would have a powerful influence upon the art of war.

Regularly to receive distributions of bread through the labors of the administration, the army should be either stationary or in retreat, always remaining at the same distance from its magazines, or approaching them.

If in marching forward, it departs from them in a constantly increasing manner, the operation would be impossible for any commissary, however skilful he might be; for convoys could not move more rapidly than the army, and they would follow it always at the same distance as at the moment of departure; at each new expedition of a convoy, the distance increasing, the difficulty becomes greater.

In a war of invasion, the troops can only live upon the resources of the country through which they range. But the time necessary to make bread in inhabited places, the ordinary insufficiency of mills and ovens, and their distance, render local resources very incomplete, and the penury which results from these things leads to great sufferings and great disorder. Now, the maintenance of order, of every kind, and in every manner, is the safety of armies.

The only efficacious means of insuring the regular subsistence of the soldier, is to put upon himself the duty of

providing, according to a designated mode. I have made the experiment, and the result was entirely favorable.

Men do not make war in a desert, or if such an exceptional circumstance should happen, they make their dispositions accordingly. War is ordinarily made in inhabited countries; and where there are people, there is grain to feed them. It is then in the means of using the grain, with which the barns are filled, that the solution of the question is found.

The great difficulty is to reduce the grain to flour, as I will explain further on. There must be mills to grind the corn; men could live, at need, on flour alone, without turning it into bread; but they would die of hunger on heaps of corn.

When manual labor is scarce and dear, there is advantage in using powerful machines in manufactures, and in centralizing the labor; but when manual labor is abundant and costs nothing, it would be better to follow an entirely opposite system. By thrusting the labor from the centre to the circumference, it is rendered easier; and by putting it into the hands of those who will profit by it, their zeal and punctuality are assured. That being settled, it is evident that the labor of soldiers can be arranged, without disadvantage, and it is to their benefit to receive, as an indemnity, the current market price of the labor with which they are tasked.

Why is it that, in the field, soldiers never lack soup, when they have meat, bread and camp-kettles? It is because they make it themselves. If a commissary had conceived

the idea of undertaking it for a whole division, on any pretext whatever, or even a colonel for his regiment, never, while marching, would soldiers have it to eat.

Let us apply this example of soup to bread making, and the soldier would never want for it. I propose to give the army portable mills: I tried this measure in one campaign in Spain, and it succeeded completely. The army of Portugal, in 1812, subsisted thus, during six months; the only disadvantage encountered was that the grinding stones were rapidly worn out; that was remedied by means of a better hardening process, and very durable ones were made.

Napoleon, informed of these results, was struck, in the midst of the miseries of the Russian campaign, with the advantages which might be derived from their use; and he ordered a great number of these mills to be made for the grand army. Five hundred were sent to him; they arrived at Smolensk, at the time the army was returning from Moscow. But then there was no longer manual labor to work them, nor were there soldiers to use them.

I will state what were and what ought to be the condition of these mills:—

1. Light enough to be carried by one soldier, who leaves his ranks for that purpose, on account of its importance, if the regular means of transportation chance to be wanting.

2. Capable of being used by a single man.

3. Producing fine flour, and sufficient, with four hours' labor, for the wants of a company.

The mills of the army of Portugal produced thirty pounds of fine flour in an hour. It has been objected to this system, that the regulations having prescribed the extraction of the bran, this operation complicates the process. I answer that carefully-made experiments have proved the uselessness of extracting the bran, with grain of a good quality.

With even tolerable grain, if it be pure and unmixed, the bread is always good. When the commissariat provides bad bread, the soldier must necessarily receive it and eat it, under pain of dying of hunger, because the time of consumption is immediate; but when the grain which is issued to him is full of dust, or of any other mixture, it may be cleaned before using it, and thus the soldier will always eat good bread. In this respect, his condition will be ameliorated; it would be still more so by the extra pay for his labor, which he would receive either in money or in an increase of ration.

But this is what I judge to be the aim of the administration;—habitual simplification, in time of war,—facility of service. A general-in-chief makes more mental effort, in the present day, to assure the subsistence of his troops than for all other things, and his combinations are constantly thwarted and destroyed, for want of issues of bread, made in time.

Thus has been resolved, not only the question of indispensable food given to the troops, but also that relative to bread, properly so called. Means have been found to make, by a simple excavation, in all kinds of soil, and in

four hours, ovens which two hours afterwards are ready to bake bread. In every bivouac, flour is made in sufficient quantity for daily consumption; and at every rest or stop in the movement, furnaces are made in the soil of a peasant's homestead, and bread baked in advance. From that moment the supply of an army takes place of itself; the administration is not more occupied with these details, than each man is with the assurance of the circulation of his blood: it is the consequence of a principle which is constantly in action.

In time of peace, the government should have magazines of grain to issue to the troops. In a defensive war, it should be the same. In a war of invasion each regiment would receive daily from the administration of the country through which it was passing, or would take from the barns of the inhabitants, the necessary quantity of grain. But the habit must be followed and contracted during peace; for, on principle, the usages of peace ought to assimilate as far as possible to those of war; and this truth is particularly incontestible when it concerns the introduction of a great change.

SECTION SECOND.

HOSPITALS.

There is nothing sadder than the spectacle often presented in an army by **military hospitals**. Attentions,

almost always incomplete, are given to a class of men, who nevertheless, by many titles, have the right to universal solicitude. A life of devotion composes their existence; sufferings, fatigues, dangers, are their only prospect. The noblest sentiments animate their hearts, and these generous men only ask of their commanders, that, in order to secure their love, they should be just in the exercise of their authority. Such is the inherent spirit of a soldier; and it especially belongs to the French soldier, who is no stranger to any of the sentiments which honor humanity. Doubtless there are vices and evil passions in armies, as in all associations of men; but we there find also the model of the highest virtues. The preservation of sick and wounded soldiers is then a duty of conscience and of humanity. It is also of great importance for the government as well as for the general; for the greatest number of soldiers is an element of success, and their replacement by recruits, costly as it is, is far from supplying the place of those which are lost. Moreover, what confidence, what energy is inspired, on the battle-field, in a good soldier, by the certainty that in case of wounds, the most efficient succors will be lavished upon him!

Perhaps, to this end, it would be necessary to change the character of the administration of hospitals; to seek a mode of recompense more noble than that of pecuniary interest, to develop worthier and more elevated considerations, the better to sustain courage and devotion.

If the functions of those who administer to the care of the sick and wounded were elevated, ennobled and re-

warded by public opinion, and by the pleasures which the exercise of charity, and the sentiment of piety afford, there would most certainly result from this a great benefit to the suffering.

The means of achieving this result would be to leave to a religious body, who were not strangers to the subordinate functions of surgery and medicine, the care of military hospitals; not the administration properly so called, and the handling of the funds, but the monopoly of cares and of direction.

A body of brothers-hospitallers, engaged for life, or for a determined time, having honored commanders, might be charged with the care of the wards, and with service at the bedsides of the sick. Paid assistants would be placed under their orders for the more menial and disagreeable duties; but without any kind of care, in an urgent case being thought beneath the commanders themselves. The spirit of charity would support them in their labors. A detachment of these respectable brothers, after having received their destination, would never quit the individuals confided to their care. Their presence would be hope and consolation to the sick; and their holy ministry, exercised to the profit of all, friends and enemies, would become their safeguard among all the armies of Europe, when the fortune of arms should cause them to fall into their hands.

Public consideration and the joys of conscience would be their special reward. A hierarchy wisely constructed would establish a blind obedience in a corps devoted

to the practice of the most touching virtues. The general of an army should receive at times, and give the place of honor to, the superior of these brothers-hospitallers; he would honor thus all the subalterns, and would pay them with that precious coin, the value of which is increased tenfold by the measure with which it is employed.

Thus the service of hospitals would be performed by three bodies:—

1. The doctors of the medical art, physicians and surgeons;

2. The administration which creates the *materiel*, disposes of the funds, and provides the commissariat;

3. The hospital-brothers, charged with administering the cares, and with directing their entire application to the welfare of the sick.

This latter corps, constituting in some sort the board of living and energetic control of everything ill-judged which the administration properly so called might do, would offer a guarantee, at all times, for regular system.

The Knights of Malta* had their origin in the attentions given to pilgrims who were going to Jerusalem, and charity was their first law. Anarchy and disorder in the places where they were established, forced them to arm for their own defence; and, while remaining hospitallers, they became soldiers.

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* The Knights Hospitallers of St. John: after the crusades, resident at Rhodes, and when driven thence by the Ottomans, stationed at Malta, which was presented to them by Charles V.

Courage and the profession of arms have always had, and will never cease to have, an *éclat* which naturally pleases the multitude; and the character of soldiers having inspired them with a love of war, the hospitallers changed their nature. Their creation had been the expression of the wants of a certain society; and what I would restore would greatly ameliorate the condition of that mass of men, worthy of so great interest, which forms, in Europe, an energetic and truly patriotic part of every nation.

It would not be difficult to draw up the conditions for the administration and service of hospitals; but these naturally spring from the general plan which I have adopted.

For a long time past, and under the Empire, in view of the disorders of which I have sometimes been a witness, this idea has constantly occupied my mind. Under the Restoration, it was not practicable, because of the suppositions to which it gave birth; but the moment has perhaps arrived for its execution with profit and success. How great would be the relief experienced thereby, by the army of Africa, (Algerie.)

I do not disguise to myself the objections which may be urged to this establishment, nor the difficulties of maintaining harmony between rival corps, working to the same end; but there are already two, which are often far from being understood, and a third, without complicating the matter much more, would bring useful information for the enlightenment of authority.

I know besides that a kind of ridicule may be thrown

upon this institution; but I willingly brave it, giving myself up to the thought that it would contribute to the amelioration of the lot of soldiers; a powerful interest in my judgment, both for the service and for humanity.

In later years, the service of hospitals has, however, been ameliorated, by a military organization of the attendants. A system of grades, established as among troops, gives a prospect to those who serve well, and creates a means of order, of oversight and of discipline; a kind of point of honor springs up, and authority is more easily exercised. Good results should ensue.

In general, military organization insures at all times the regular action of power; it thus constitutes essentially a great means of order; it would be successfully employed whenever it was desirable to act upon associations of men destined to work together for the same end; and the more the first elements are impressed with it, the more it will tend to profit and advantage.

One word more about hospitals.

The wretched and false calculations of economy upon what we have agreed to call, in the language of accounts, the hospital daily report, have been the cause of diminishing too much the number of these establishments; and the desire of putting upon other persons duties which concern ourselves, has too frequently multiplied their abandonment. Nothing is more fatal than these two systems, when they are not prompted by imperious circumstances, such as the vicinity of the enemy, the absolute want of means, etc. In ordinary cases, hospitals cannot be placed too

closely within reach of the troops, nor can the sick be too much divided as to place. Generally, diseases of a simple nature are cured in a few days, when they are treated at once. They are aggravated by long transportation; and long return journeys, after the disease is over, exhaust men still feeble, and produce relapses which another journey renders fatal. Thus, by multiplying hospitals, and placing them within reach of the troops, their cure is rendered easier, the diseases are hindered from becoming aggravated, and the sick from being weakened; and we prevent the obstacles which bring in their train those contagious diseases, such fatal sources of the greatest ravages.

By this system, more money would seem to be expended, but the result would be a much greater economy.

This is the system which I have constantly followed, and by it the troops under my orders have found themselves well cared for.

CHAPTER V.

MILITARY JUSTICE, AND THE COMPOSITION OF COURTS-MARTIAL.

THE social state cannot subsist, if the conditions of its existence are not fulfilled. It is the same with an army, which presents the example of a particular society, subjected to special rules and a special code of morals. To discover the principle which may solve our question, I look first at the characteristics of military justice, and I find it to be the complement of the means of discipline. To whose hands should its execution be confided? To the hands of those who are charged with the maintenance of discipline, who feel every day its necessity, who perform its duties, and are the most interested in it. It is then to the officers in active service that this care should be exclusively committed.

Nevertheless, it has not always been so. During the Revolution, military judges were appointed, who were civic officers accompanying the army. The error which had thus been made was soon recognized: the consequences were fatal; and councils of war were created, such as they are at present.

In 1829, an effort was made to improve the matter,

and a new law for military justice was presented to the chamber of peers.

A commission composed of men of eminent merit, but unacquainted with troops, proposed to substitute for the temporary councils of war, permanent war-tribunals, presided over by general officers. This new method, by establishing a military magistracy distinct from the army proper, would have had all the disadvantages of the system adopted temporarily under the Republic, and would besides have altered, in the eyes of the troops, the character of generals, essentially fighting men, who should, by their presence, keep alive the ideas of glory and reward, and not thoughts of crime and punishment.

Military justice is not established, in an absolute manner, upon *moral* principles: its foundation is *necessity.*

Doubtless, in the judgment of all sensible men—as far as morality and the interest which belongs to personal right are concerned—there is a great difference between the thief, and the soldier who disobeys his commander and insults him in a moment of passion. Nevertheless, the punishment of the soldier will be the graver. To avenge society, it will be sufficient that the one should go to the galleys, while the army would be lost if the other were not punished with death: for, from that moment, all bonds are broken, and the military edifice, which is only based on respect and submission, would crumble without this support.

There is then an immense difference between civil justice and military justice. The latter seems barbarous,

but it is indispensable; and its execution can only be insured by the very persons who, by the conditions of their existence, are interested in it.

If the battalion forms the unit for battle, the regiment forms the social military unit,—the family and the tribe. The colonel, the chief of this society, is invested with a kind of magistracy which must carefully guard its preservation.

It is for him to punish; it is for him to assure to each one impartial and speedy justice, to maintain daily order, and the execution of the laws, upon which that order rests. Thus when regular armies have been formed, each regiment has had its tribunal under the high oversight of its colonel; and even at that epoch it was not only a necessity, but a right; for each colonel being the administrator of his regiment, should have legal and extended powers as the guarantee of the obedience of his subordinates.

Regimental tribunals still exist in many of the great armies of Europe. Placed within reach of the persons to be tried, their action can always make itself felt without delay. This consideration is of such capital importance, that perhaps there is reason to prefer that system to another adopted in France and Russia,—that of division tribunals only.

We understand the motive which has influenced the legislator; he wished to shelter the accused from the personal passions of the commanders, by causing them to be tried before a tribunal composed in great part of officers

not belonging to their corps. On the other hand, these officers being in active service and employed with troops, it seems certain that their judgment, delivered without prejudice, will have that severe character which the good of the service demands; for the colonel who presides would do for the interest of any other regiment just what will be done at some later time for his own regiment by another colonel. The interest of the army will always be considered.

There has been established, in each council of war, an organization of officers of every grade. It is a recognition of the sentiment of duty which is remarked equally in all the parts of a hierarchy, and a guarantee for the accused, who thus have one or many of their peers—in rank—among their judges. Such an arrangement is without danger; for indulgence, if that be feared, is more probable in elevated than in inferior grades.

I conclude then that, on all grounds, military tribunals ought to be exclusively composed of individuals in active service, and belonging to the very corps placed under their jurisdiction.

A final arrangement would perhaps be desirable in military justice. It exists in Austria, and the effects seem to me salutary. The right of pardon and the commutation of punishment are not reserved to the sovereign; they belong to the colonel proprietary of the regiment;*

* The "proprietor" of a regiment confers his name upon it, and nominates the officers up to the grade of captain, inclusive.—*McClellan's "Armies of Europe."* Topic, "*The Austrian Infantry.*"

who, in practice, delegates their exercise to the field officer commanding. There are so many circumstances which may operate in favor of a soldier guilty of breach of discipline, (it is almost always for such acts that pardon is granted,) the commanders who are upon the spot are so fully able to appreciate the opportuneness of an act of clemency, that it would be, in my judgment, very useful to confer this prerogative, not to the commander of the corps, but to the commanding general of the division, or of the *corps d'armée*.

In the present condition of things, a brave soldier, whom every one would willingly save, perishes, a victim to the rigor of the law; or, in the desire for his preservation, justice is violated,—an equally painful alternative.

PART III.

DIFFERENT OPERATIONS OF WAR.

CHAPTER I.

THE USE OF THE DIFFERENT ARMS.*

THE troops of the different arms should be separately organized, that they may receive the uniform instruction which is appropriate, and acquire a suitable spirit.

This principle has sometimes been deviated from, by forming *legions*, but they have not worked well. The officers who command these corps, being best acquainted with the arm in which they originally served, always give it the preference, and treat it according to their predilection. In the artillery, it is absolutely impossible to provide for the needs of instruction; for it would re-

* The use of the word arms is twofold; it refers to weapons,—the musket, cannon, sabre, lance, etc.; and also, as in this connection, to the great essential division of troops into *infantry*, *cavalry and artillery*. These are called *the three arms*.

quire us to multiply infinitely the necessary establishments, such as the polygon,* schools, and batteries of different kinds. The artillery ought therefore to be collected together in a single garrison, if possible, that they may all receive the same instruction. The government might then devote more money to this object, since a greater number of individuals would participate in it. I proposed this when I was commander of the French artillery; but considerations of administration and economy, based upon local interests, prevented the adoption of the change.

But if the arms should be separated in time of peace, the better to develop their special instruction, they must be combined in time of war.

It is by mingling them intelligently and skilfully, that the best results are obtained; they sustain each other reciprocally, and concert their efforts appropriately. By leaving together the same corps, associated during many campaigns under the same general, an *esprit de corps* is created, and, in consequence, a useful homogeneousness. The troops have thus all the value of which they are susceptible. The **legion**, among the Romans, is the first example of this combination, which certainly contributed powerfully to their triumphs. "A divinity," says Vegetius, "inspired them with the conception."

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* The "*polygone*" is a place enclosed by works resembling those of a fortification, set apart for the instruction of the artillery, in their various exercises; "*Le petit polygone*" is the place for carrying on gun-drill in winter, generally in the bastion nearest to the artillery barracks.—*Burns's Naval and Military Dictionary, voce* "POLYGONE."

In the middle ages, in the period which followed them, and even down to our time, the greatest generals had no idea of imitating them; even Frederick did not think of doing so. The essay was made in the French army, at the end of the seven years' war, under Marshal Broglio,* and to this belongs the glory of putting that profound conception into practical shape. But the usage was not established until the commencement of the wars of the Republic, and then it was that the art of war underwent one of the greatest revolutions of our day.

The infantry, organized formerly in brigades, was under the orders, when it was formed, of two or three generals, who commanded the centre and the wings respectively. The cavalry was in the same manner divided and placed upon the wings, and the appointments to subordinate commands were given only upon the day of battle. All the generals resided ordinarily at the general headquarters, and they were charged, in routine, with the duty of leading detachments. The general of an army, wishing to confide an instant command and the charge of an expedition to a very capable general, or one who inspired him with more confidence than the rest, was thus forced to wait until the order of the roster brought the turn of that individual to march, and he must adjourn the opera-

* There were several of this name. The one here referred to is Victor Francis, born, 1718, who was not only distinguished in the seven years' war, in which he fought under D'Estrées at Hastenback, and under Soubise at Rosbach, but he was Minister of War to Louis XVI. in 1789, and commanded a division of *Émigrés* in 1792. He died in 1804.

tion, or make fictitious detachments, to employ those who preceded him. The detachments having returned, the troops were separated, and the brigades received their destination by the directions of the general staff. It is asked how, with such a system, an army of any size could be moved, could form and fight?

They employed whole days at a time, simply to put the army in line of battle. The least movement often produced confusion, and the heavy artillery, leaving the park for the battle-field, and put in battery sometimes the evening before, went into park again immediately after the action.

This barbarous and absurd system has been changed since our earlier wars; and all the armies of Europe soon adopted, from our example, the new organization, which gives mobility to the troops and renders them always ready to fight. A general has thus the means of making with facility such combinations as circumstances and his genius may inspire in him.

In an army, the constant unit, which should never vary, but the numerical strength of which may be greater or less, is the **division**. It is ordinarily composed of two brigades, each of two regiments, and sometimes of three; and it has, besides, two batteries of artillery and a corps of seven or eight hundred horse. It has a complete administration; it is an army on a small scale: it can act separately, march, subsist and fight; or it can come with ease to take the part assigned to it in line of battle.

It was thus that the French army was organized in our

first and immortal campaigns in Italy, and also some years afterwards. At a later period, Napoleon having formed *corps d'armée*, he withdrew the cavalry from the divisions, and contented himself with applying to the *corps d'armée* the principles of the legion. But in the *corps d'armée* the cavalry is too far from the divisions; it is not under the control of the infantry generals who conduct the battle; it is unable, in many circumstances, to take timely advantage of the disorders which arise in the enemy's ranks. I shall hereafter speak of *corps d'armée*, and the circumstances which have authorized and even necessitated their formation.

The division is then the army unit, the first element by which the three arms are bound together in an intimate manner; but the wants of an army are not limited thus.

Each arm, after having been accessory, must in its turn become a principal element, because there are circumstances in which a particular effect is to be produced. Thus cavalry reserves are indispensable, whether for engaging masses of cavalry, or to precipitate themselves upon ill-supported infantry corps, or to cover infantry when in disorder, or to carry batteries, etc.

This cavalry should be supported and sustained by an artillery force belonging to and associated with it, according to circumstances, in order to obtain the desired result. The cavalry is here the principal arm, and the artillery accessory. But the turn of the latter also comes during the battle; the artillery reserve, employed to produce a great effect, at a given moment and upon a designated

point, becomes suddenly the principal arm; it crushes the enemy with its fire. Then the infantry advance, which completes the disorder, and finally the cavalry, charging upon them, finish their destruction and assures the victory.

I shall not enter into those details which would establish the character of the circumstances in which the artillery is charged with the exclusive part; but I have already said enough to conclude that each arm must be, in turn, accessory and principal; and if the artillery is to act upon an isolated point, the infantry and cavalry troops, designed to protect it and assure its safety, must be subordinate to it in all their movements.

But cavalry reserves, important as they are, should not exceed a designated force upon a given point: beyond certain limits, the most skilful general cannot handle them; and, besides, it is difficult to subsist a great number of horses together.

I would limit the force to six thousand horse, the management of which is practicable; with this number success ought to attend any reasonable undertaking with cavalry upon the field of battle.

Napoleon, in his last campaigns, organized bodies of cavalry composed of three divisions numbering at least twelve thousand horse. This idea was monstrous, and without useful application on a battle-field; it was the cause of immense losses without fighting, these great corps having served no other purpose than to present an extraordinary spectacle, designed to astonish the eye.

The organization of armies should then establish divisions, and reserves of each arm. I refer to armies of moderate strength; for in great armies, there must be besides an additional echelon, as an element of order and of action. This is brought about by constituting the troops into *corps d'armée:* that is, there should be established fixed commands, intermediate between the commander-in-chief and the generals commanding divisions.

An army of 100,000 men, arranged in ten or twelve divisions, would be difficult to manage, if it were not organized in *corps d'armée;* for confusion would soon arise on account of the too great number of independent units, allowed to manœuvre freely according to the general direction given by a single commander-in-chief. The need has therefore been early felt to form new aggregations of these divisions, to simplify the arrangements of the general-in-chief; and two, three, or four divisions have, to this end, been united together.

Thus an army, composed as I have just indicated, is divided into four fractions; the general-in-chief can move these with facility; he has in hand four corps, of which three form his line of battle, and the fourth his reserve.

In all grades of the military hierarchy, it is by placing a commander in communication with a small number of immediate subordinates that the exercise of authority is facilitated.

The *corps d'armée*, being small armies, should have an organization analogous to the principles which I have established, and should be thus composed:—

1. Of three divisions, in which the three arms are combined;

2. Of a reserve of cavalry, supported by horse artillery;

3. Of a reserve of artillery.

The reserves, designed to move in any direction, at need, should be very easy of movement, (*mobiles,*) and for the artillery, which must often take post at great distances, light artillery should be employed.

Thus ordinary artillery, which by its new organization is very moveable, would answer for service with the divisions of infantry; and light artillery would be exclusively employed, in serving with cavalry and for reserves.

The organization, a sketch of which has been now presented, is in accordance with the formation we use at the present day; it results from the nature of the arms and the manner in which war is now carried on, and the fractions of the army are designed to render the exercise of command easy. The commands are of different kinds, and their character is changed according to the number of troops.

A general fights with 10,000 men; he must be in the midst of his troops, and often exposed to musket shot.

A general commands 30,000 men; he puts his troops and reserves in motion; and if he is habitually, except in extraordinary cases, out of the range of musketry, he must be constantly within that of cannon, and must remain in the limit of space where balls are falling.

A general directs 80,000 or 100,000 men; he arranges the plan, gives the orders before battle, gives impulsion to the movement, and awaits the events in a central posi-

tion. During the action he becomes a sort of providence; he confronts unforeseen circumstances, and remedies great accidents. He must expose himself before the battle, in order to see for himself and to judge with precision the condition of things; these duties being fulfilled, he gives his orders, and leaves each one to play the part assigned him.

If things go well, he has nothing more to do; if accidents happen, he must parry them by the combinations which are in his power; if the action is progressing very badly, and a catastrophe is to be feared, he must put himself at the head of his last troops which he launches upon the enemy, and his presence, in this extreme moment, gives them an impulsion and a moral effect which doubles their value.

It was thus that Napoleon exercised command. His operations having been almost always crowned with success, and the armies he commanded being of very great numerical strength, he was rarely exposed to imminent danger. But at Lützen a great crisis occurred, and the nature of the army, composed of young soldiers, increasing its importance, he rallied the troops himself before Kaya, and led them to the charge under a deadly fire.*

* According to Thiers, something like this occurred more than once: "Kaya was forced. * * * Napoleon, in the heat of the fire, rallied the conscripts. 'Young men,' said he, 'I had counted on you to save the Empire; and you fly.'" And again: "In the midst of our conscripts, some of whom fled, even in his presence, in the midst of balls and bullets falling all around him, he advanced the Young Guard."—*Le Consulat et l'Empire*, lib. 48.

It must be evident, from what I have already said, what principles have served as a basis for the creation of grades. It has been desired to assimilate them to natural commands, so that the chief may have a social position entrenched from the observation of his subordinates, and always above them, even out of service.

France is the only country where they have omitted, to the great prejudice of the service, to create an intermediate grade between that of general and marshal, for the command of a *corps d'armée*. The dignity of marshal only comports with a command in chief, and the sad experience has been attained that many marshals brought together in the same army, and under the command of one of their own number, almost always lead to great misfortunes, by the want of agreement and of subordination which reign among them. There was necessary an emperor, a great captain, to command an army, the great corps of which are under the orders of marshals. Corps, it is true, were often under the orders of lieutenant-generals, to whom was given the temporary title of general-in-chief, and who received a commission to command. I should add that a commander who had received such power once, was never afterwards called to the command of a single division. But the grade being always the same, it is annoying to establish voluntarily and freely such relations.

As authority, everywhere necessary, is nowhere more so than among troops, and since from the command of an army to that of a company, it is essential that the chief

who disappears should be immediately replaced, it has been necessary to establish, as a fundamental principle, the seniority of command. But it is otherwise with the accidental exercise of this right by the fortuitous result of events in war, (each one feels the necessity of this arrangement;) it is otherwise with the delegation of authority with the same rank, by the will of the sovereign, and when he is master, to choose.

Self-love (*amour propre*) suffers in obeying an equal, especially if he is a junior; and self-love, the cause of so much good and so much evil, exercises, in the profession of arms, an immense power, for it is its very life.

An army composed of men without self-love would be worthless; it is because they are filled with it, that the French are such good soldiers; it is thus also that soldiers furnished by large cities, where self-love is most active, but who are less strong and less robust, often greatly surpass in worth those who come from the country.

CHAPTER II.

OFFENSIVE AND DEFENSIVE WARS.

I HAVE already said, and I repeat it, that movements in war, whether offensive or defensive, must always be based upon a calculation of time and distance. But the applications of this principle are easier in defensive than in offensive war.

In the latter the operations are vaster, the conditions more variable, the elements of the calculation more uncertain. At any moment one may be forced to change his part, to abandon an attack in order to defend himself and to escape great perils. There is needed, therefore, a greater genius, to be always ready to vary his projects, to execute new combinations.

In a defensive war, the theatre is more contracted; the operations are upon familiar ground, the nature of which may be exactly appreciated. The combinations being less in number, it is easier to arrange for them and to confront them. In offensive war, genius must supply the want of experience, and guess at the character of the country in which the operations are made: the points of support upon which we count, vary and sometimes disappear. In defensive war we act upon a field prepared and studied; we have fixed pivots of operation; everything may be calculated with precision. A superior genius is

then more necessary for offensive war, while a great knowledge of the profession, the talent to choose judiciously the points of support, an extreme foresight, with indefatigable activity, may suffice for the needs of defensive war.

Nevertheless this kind of war is far from being easy, because, properly speaking, a general is only reduced to act on the defensive when the means at his disposal are inferior to those of the enemy. Now, in modern wars, with equality of arms, instruction and experience, numbers are of chief avail. The difference which exists between such and such an army, in such and such a campaign, depends particularly on the *moral;* and appreciation here does not belong to the rules of the profession, but to that sublime part of the art which supposes an acquaintance with the human heart, the movements of which are so rapid and so mysterious.

After having settled the *principle* of the movements of armies, we can only develop it by examples.

The instruction is to be found in the study of the most memorable campaigns. Doctrinal teaching must rest upon facts. These may be chosen both in successes and in reverses, by showing in the narration of each event what part was due to combinations and what to chance.

We should study in preference the events of our own epoch: the examples will be better understood, the circumstances being better known. Besides, with the progress which the art of war has made, with the present and always increasing mobility of armies, we have con-

trived to render easy what would formerly have been impracticable. Among former wars, which may still be useful for our instruction, are those of Frederick II. (the Great.) It is true that the examples of that time are scarcely applicable to our days, things have changed so much; but it is in relation to the *moral* of war that we should consider this great captain

When we see Frederick, beaten at Hochkirch, and after having lost two hundred cannon, retire only two leagues upon the Spree, take position there, and brave the menaces of his victorious enemy, we ask in vain for the explanation of a mystery which no one at this day understands.

When we reflect upon the weakness of Frederick's resources, we ask again, how, in the presence of so many enemies, and for so many years, he could maintain and recruit his armies? In truth, we do not know which to admire most, his victories or his power of resources and preservation.

The long wars of our epoch, the great events which they offer to our meditations, all the circumstances of which must be weighed, are equally to be considered, in our armies and in those of the enemy.

The first campaigns of the revolution present nothing in our armies or those of our adversaries, which is not susceptible of a bitter criticism: of this we may easily convince ourselves by reading the first volume of the Memoirs of Marshal Gouvion St. Cyr, which in this connection have a very lively interest.

The operations of the Archduke Charles, in 1796, opposing the French armies of the Sambre-et-Meuse, and of the Rhine, are the first example of operations combined systematically on a vast scale; we cannot meditate too carefully upon the work of this prince, in which his principles are established, with the demonstration of his operations and the motives which directed them. All the great principles of war are there deduced, at the same time that they find their application in the facts which are there set forth.

But the campaigns which most demand reflection are those of the French army in Italy, in 1796 and 1797. They all combine exactness in calculation, correctness in movement, a profound knowledge of men and of things.

Never was war so admirable, so perfect. It was the art put in action in its sublimest elements. With moderate means, immense results were obtained.

That one year's war hardly presents models of every kind. But we find an offensive, skilfully and audaciously conducted; a defensive, in which smaller forces constantly repulsed superior forces, by contriving to present often upon the battle-field a superiority in numbers; a war which, by skilfulness of direction and vigor of execution, led to an unexampled series of victories. Immortal epoch, the prodigies of which surpassed all that has been done before or since; for in a series of combats so long, in the midst of so many diverse movements, it is impossible to discover a single error, a single forgetfulness of the true principles of the art.

At the moment of the opening of the campaign, the French army, scarcely thirty thousand strong, lacking everything, has not yet finished its preparations, when it is forced to enter upon its operations, the enemy approaching Genoa to cover that place. The hostile army is attacked, more than fifty thousand strong, but composed it is true of troops of two different nations. The Austrians are beaten, pursued, and soon held in check by a single division. The French army throws itself upon the army of Piedmont; complete and rapid successes spread confusion and discouragement among the allies, and the King of Sardinia makes peace.

A precipitate march surprises the passage of the Po, which the French army, for want of means, could not have been able to force in presence of the enemy. An energetic action gives them the passage of the Adda. Milan opens its gates. A little after this, an insurrection bursts out in an entire province; the insurrection is suppressed. The army, which has hardly slackened its march for a moment, forces the passage of the Mincio, arrives upon the Adige, and takes a defensive position which covers the conquests it has made in less than fifty days. Hostile armies are successively formed, and come to try upon us unavailing efforts. Mantua falls; we march upon Vienna, and peace is concluded.

Nothing could be more useful for the instruction of officers who give themselves up to the study of great campaigns, and to military conceptions of a high order, than to write this memorable campaign, with the details

and the documents belonging to it. Commentaries would be thus united which would explain the philosophy of the movements, and would display their spirit and results. The campaign of 1805, so splendid, so well conducted, and so remarkable in its *dénoûment*, favored, it is true, by the immense and almost incredible mistakes of our adversaries; that of 1806, which completes it; and finally, that of 1809, might be the objects of a special study and of instructive commentaries; for we cannot too much admire this grand epoch of Napoleon's life.

But we must pass over in silence the war in Spain, and the period which follows, or at least only speak of them to discover the errors, and to demonstrate that fortune was right to abandon Napoleon, at the time when he was unfaithful in his conduct to the true principles of war, which up to that time he had always respected. The accumulation of men and means was useless; to date from those epochs of sad memory, if we except Lützen and Bautzen, we do not recognize Napoleon in any of his campaigns.

A sort of awakening came, however, a little later. The great captain discovers himself in 1814; but opinion alone was then fighting for him: he had no longer an army; scarcely were we one against ten. Never did the forces of which Napoleon could dispose in his movements between the Seine and the Marne, exceed thirty-five thousand men, fragments of his former army. My corps,*

* In this campaign of rapid and successful movements, (1814,) the talent of Marmont was especially conspicuous, and nowhere more so than in the movements in and about Paris.

which alone claims the glory of the combats of Champ-Aubert, Vauchamps, Montmirail, the second affair at Gué-a-Trême, never had four thousand men, the relics of fifty-two different battalions. At Paris, supported by the Duke of Trevisa, (Marshal Mortier,) our united forces were fourteen thousand men, and the enemy had fifty-three thousand engaged, and thirteen thousand *hors de combat.* It was the song of the swan.

CHAPTER III.

MARCHES AND ENCAMPMENTS.

Marches within reach of the enemy cannot be made with too great precaution, nor can **encampments** be selected with too much prudence. Every one knows how the former are executed; but the composition of advanced guards, and the respective position of the arms which form them, must be modified by the nature of the country.

The aim being to gain intelligence of the enemy, and to be informed of his arrival as soon as he approaches, it is most useful to reconnoitre at the greatest possible distance, without, however, compromising the detachments. The advanced guard of an army which is not in presence of the enemy, ought at least to be a day's march from the main body; and that of a division several hours in advance.

Light troops should be intelligently employed, and they should not be spared; for it is chiefly in this kind of service that they are useful: if they allow an army to be surprised, their commander has failed in his duties; he cannot allege a good excuse. It is especially in intersected and wooded countries that precautions must be redoubled. Skirmishers, thrown out on both flanks, should be supported by detachments appointed for them to rally upon, and should be, moreover strong enough to defend,

at need, for some time, defiles which might afford to the enemy the means of turning the flank of the army.

In marches, encampments are made to rest the troops and to satisfy their wants, not at all to fight. An encampment is made, by preference, on the banks of a streamlet, near a village, because the soldiers have the advantage of the water, and the resources which a collected population presents. But however important these considerations may be, safety also must be considered, and the means of resisting an unforeseen attack and a surprise must not be neglected. I am not speaking of guards, who always must cover and surround the camp; they are of prime necessity, were it only in the relation of a police force.

When there is an obstacle, the establishment of camps should be chosen within, and never beyond, at least for the greatest part of the troops. Without doubt it would be advantageous, when the day's march begins, to have passed a defile and to debouche more easily; but this advantage is more than compensated by the security of the repose. If there is no obstacle, or if this obstacle may be easily turned, a surprise is to be feared; a large body of cavalry may suddenly appear, as if it had sprung out of the earth; safety then is to be found in the arrangement of the encampment itself.

There are two modes of encamping: the troops deployed in front of the color-line, and the troops formed in mass by battalion. This last arrangement is far preferable, and offers all kinds of advantages.

It is executed thus:—

A division* is placed in two lines, and each battalion is formed in mass by division; they are separated by two half battalions formed in mass by company. The interval which separates the two fractions is the extent of a division front, and forms a street perpendicular to the front of the encampment.

The tents or barracks are established on the right and left, and the spaces between them are placed so as to open into the street, either directly or by a little cross street. At the moment when the battalion takes its arms, each soldier goes to his own company, which is formed in the street of the camp, and the battalion is formed at the very instant, and ready to march. If the impetuosity of a mass of cavalry is such that it precipitates itself upon the camp, it will find all the troops in mass, and, so to speak, entrenched in the midst of their tents and barracks.

Contempt of the foregoing rules led, on the 29th of May, 1813, near Haynau, in Silesia, to a fatal event.

The division Maison,† which had marched the whole day, and taken position without proper reconnoissance, was surprised: twenty-two Prussian squadrons, in ambuscade in a neighboring forest, suddenly debouched, at the

* The division here referred to is a mass of troops comprising two or more brigades; the word as used immediately afterwards means the union of two companies. The double use of the word has often led to confusion.

† The divisions of the French army receive the names of the generals commanding them.

moment they were establishing the camp; the division was in great part destroyed without having been able to fight.

In another circumstance, the same negligence on the part of the Prussians gave us a splendid revenge, and caused us to obtain an easy victory.

After the combat of Champ-Aubert, (February 10, 1814,) in which my *corps d'armée* had, unaided, destroyed or taken almost entire the Russian corps of Olsufieff, the Emperor ordered me to proceed to Etoges, to cover the army on that side, while he should march upon Montmirail, which was occupied by the corps of Sacken. Sacken, beaten, retired upon Chateau-Thierry, where he crossed the Marne to stay the pursuit of Napoleon, who had followed him. During this time Blücher, in person, had advanced with the corps of Kleist, and had marched upon Etoges: on the 13th he undertook to force me to evacuate this advantageous post. After having made a feint of desiring to defend it, I retreated. The enemy followed me closely, but with great circumspection, and there were until evening only weak engagements with light troops. I took position on the skirt of the forest of Fromentière, and the enemy encamped at about twice cannon range from me. I had announced to Napoleon the arrival of Blücher, and had advised him of the movements I was going to execute: I was assured of his prompt return. On the 14th, at four o'clock in the morning, I set my force in motion to approach Montmirail, and I sent an officer to obtain intelligence of the Empe-

ror. He had just arrived, and sent me word that I might attack the enemy whenever I thought proper; that he was in condition to support me.

There is in front of the village of Vauchamps, on the side towards Paris, a position advantageous and easily defensible; it is the slope of the plateau which borders the small valley on which Vauchamps is built; to the right and front, a wood presents the means of taking in reverse all bodies which should advance inconsiderately without having occupied it. I caused this wood to be occupied as quietly as possible; I deployed my troops on the hill, I put my cannon in battery, and we awaited the enemy.

The corps of Kleist, the strength of which was four times that of mine, thought it had nothing to fear, and marched with extreme confidence, the troops being in column, and touching, without any interval between them, and even without scouting: finding the village unoccupied Kleist passes through it, but, assailed by a murderous fire of artillery and musketry, attacked at the same time in front and flank, thrown into confusion, he flies from the village in great disorder, and, our cavalry pouncing upon him, four thousand prisoners fall into our hands. From that moment the enemy, who had no regular formation, withdrew in mass until evening; while that day, so splendid for us, terminated for him in a new catastrophe.

The victory of Hohenlinden, the brilliancy and the results of which were so great, is an event of the same nature. The centre column of the Austrian army, which

followed the high road, and to which had been united a great part of the artillery of the flanking columns, to facilitate their transportation, outstripped the other columns, and was marching without proper scouting parties, by reason of the confidence imparted by the combat of the evening before, and the belief entertained by them that the French army had beaten a retreat.

They encountered the French unexpectedly in the very middle of the forest. Attacked vigorously before they were able to take the necessary dispositions to resist, and soon taken in flank, this immense column of *materiel* was captured, and the battle won.

There is nothing more delicate or more worthy of attention than how to conduct a numerous artillery through a very wooded country, in presence of the enemy. Whatever may be the desire for keeping it together, too much precaution under such circumstances cannot be taken to guard against surprise, for the consequences of the slightest negligence are almost always fatal.

On the 29th of August, 1813, after the battle of Dresden, I was charged with pursuing the enemy's army, the main body of which was retiring by the Altenberg road. After having beaten, at Possendorf and Dippoldiswalde, the corps which covered the movement of concentration, I was to continue, the next morning, my march upon Falkenheim. Arrived at the village of Frauendorf, I learned that the enemy occupied, with a strong advanced guard, a good position at Falkenheim. Before entering the forest which must be crossed, and which some light troops occu-

pied, I had it searched and cleared by three or four thousand infantry, extended upon a very long front. Having cleared the forest, I took a position upon the skirt of it with my advanced guard, and I waited until my whole corps had joined me. I debouched then with all my force: in a moment the enemy was overthrown and driven from his position, abandoning almost all his artillery.

There are also marches executed in presence of the enemy, with your army entirely united, formed and ready to fight, having the design of causing the enemy to leave a position which he is occupying. These marches belong to tactical movements; nothing demands greater attention or exacts greater precautions.

To execute a movement of this kind, the troops must be well disciplined and thoroughly drilled, the generals vigilant and active, and the commander possessed of extreme foresight.

The army of Portugal, in 1812, under my command, made such a march successfully.

The French and English armies were encamped on the two banks of the Duero; the former was inferior to the latter by about 6000 foot and 4000 horse.* In spite of the disproportion of force, I was obliged to assume the offensive. I was informed, by official correspondence, that no important succor could be afforded me; and, on the

* Earl Ellesmere, in the article before alluded to, (Foreign Quarterly,) disputes this assertion: proving from the morning reports of the French and Anglo-Portuguese armies, for that day, that the disparity was only 2500 men.

other hand, the English army, already so superior, might in a few days receive powerful reinforcements from Estremadura by the bridge of Alcantara, while the army of Galicia, which was blockading Astorga, was going to be disposable, and to operate in my rear, in consequence of the surrender of that town, which, for want of supplies, was on the point of opening its gates. I concluded that to change the condition of things, I must assume the offensive, prudently indeed, to manœuvre so as to force the enemy to retreat, and not to fight unless it should be necessary. The passage of the Duero was then resolved upon and executed.

The French army, united, encountered the next morning two English divisions at Tordesillas de la Orden, which hastily retired; they were closely pursued, (*l'épée dans les reins,*) and would probably have been destroyed, isolated as they were, if the French cavalry had not been inferior to those of the enemy.

The two armies were posted on the evening of that pursuit, facing each other, and separated by the Guarêna, a marshy brook.

On the 20th of July, the French army, formed in order of battle, broken by company, made a flank manœuvre by the left to ascend the stream; having arrived at a crossing known beforehand and promptly improved, its head crossed to the left bank, laid hold at the outset of a plateau which extends indefinitely in a direction threatening the enemy's retreat, and debouched there under the

protection of a very large battery which covered its movements.

The Duke of Wellington thought at first that he would be able to oppose the offensive march; but it was so rapidly and unitedly executed, that he soon renounced the idea of attacking.*

He then set the English army in motion, following a plateau parallel to that which we occupied.

The two armies continued their march, separated by a narrow valley, always ready to accept battle; some hundreds of cannon shot were exchanged, according to the more or less favorable circumstances to which the sinuosities of the ridge gave rise; for each of the generals wished to accept battle, and not to attack. They arrived thus, after a march of five leagues, in the respective positions which they desired to occupy,—the French army upon the heights of Aldea-Rubia, the English army on those of San Cristoval.

This remarkable march is, moreover, the only fact of that nature which, to my knowledge, has occurred in our days. But it may be renewed, in a war in which the forces are about even, and when the generals do not desire to fight except with assured advantages, or in determined and very favorable circumstances.

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* The Duke of Wellington told me afterwards that the French army marched, on that occasion, like a single regiment. That was his expression.—M.

CHAPTER IV.

OF RECONNOISSANCES IN FORCE, AND THE PRECAUTIONS THEY REQUIRE.

To know the position of the enemy, to have timely information of the movements he is making, to collect sufficient intelligence to guess his plans,—these constitute one of the greatest difficulties which the command of an army habitually presents. Nothing should be neglected by which we may obtain exact information, and the surest method is always to be in contact with the enemy by means of light troops, frequently to have small engagements, and to make prisoners, whose answers are almost always simple and sincere. More is learned through them than by means of the most faithful spies. The latter often confound the names of corps and of generals, and form very inexact estimates of the strength of the troops concerning whom they report. When two armies, by the combinations of war, find themselves suddenly in presence of each other, or have remained a long time at a certain distance from each other, it is important to be most positively assured of the situation of things: to this end, there are made what are called **reconnoissances in force,** (*grandes reconnaissances.*)

These operations demand much prudence, and even an especial foresight, particularly if we have not decided to

fight, except under extraordinary and very advantageous circumstances.

Cavalry should be principally employed; and, if possible, only cavalry and light artillery should be engaged, so that we may remain master of our movements. What is to be done is to tear away the curtain which conceals an army; and when a general has been able to penetrate sufficiently to see with his own eyes the situation of the enemy, he has accomplished his purpose.

But he must make such dispositions as to sustain the troops engaged, and to receive them if they are hurried backwards. He should have quite within reach a respectable body of infantry; and in rear of that corps, the whole army should be drawn up for an immediate march, if circumstances require it, to take part in the action. A moment of delay might cause the loss of sudden opportunities, which, properly seized, give unexpected advantages.

I will cite an example in which the non-observance of this precept prevented me from gaining an easy victory over the English army in Spain. Instruction is perhaps better conveyed by recalling mistakes, than by relating successes.

In 1811, I was occupying the valley of the Tagus, with the army of Portugal. My mission was to guard the safety of two strongholds which covered the north and south, Ciudad Rodrigo and Badajos, which belonged to the armies of the south and north, and formed part of their field of action. Ciudad Rodrigo, being in want of

provisions, General Dorsenne, commanding the northern army, organized a great convoy, and made his dispositions to conduct it thither. He furnished 10,000 infantry and 2000 horse for its escort. But the concurrence of the army of Portugal was necessary to render its march safe, the English army being in cantonments very near. I took the greater part of the army beyond the hill of Baños, and placed it in echelon from Tamames to the river of Aguéda. I repaired to Rodrigo with 1500 horse; General Dorsenne went there also, and introduced into the city, with great supplies, a small division of 3000 infantry, commanded by General Thiébault. The rumor was rife that the English were making arrangements to besiege Rodrigo, and that provisions within reach had been collected there. To gain correct information was opportune, and it was agreed that a strong double reconnoissance should be directed upon the Almeida road, and on the heights of Elbodon, where the English army had its advanced posts. This reconnoissance was to be made by the cavalry of the army of Portugal, commanded by General Montbrun.

General Thiébault received orders to be ready to sustain him if necessary. The position of Elbodon being captured in a moment, the cavalry of the English army was put to flight, and a brigade of English infantry found itself isolated. After having bravely received several charges, it retreated upon Fuente Guinaldo. Favored by difficult ground, and thanks to the rapidity of its march and its valor it could not be destroyed. Fuente Guinaldo,

the knot of the roads, and the strategic point for the assembling of an army, must then be occupied without delay. The division Thiébault was called upon; but placed at too great a distance, because it had only come out with the design of defence and security: the field of battle being singularly distant on account of the retreat of the enemy, it arrived too late, and its extreme weakness did not permit, at the very verge of nightfall, that it should be launched upon the entrenchments of Fuente Guinaldo, upon which columns coming from different sides were directed. If 8000 men had been in my hands, I could have acted confidently. Fuente Guinaldo would have fallen into my power. The light division posted at Martiago, upon the right bank of the Aguéda, would probably have been taken or destroyed, the English army dispersed, and its corps, without union, would have been in the most critical position. Having had the time to reassemble, it hastened to make good its retreat, and the opportunity of an easy and complete success was thus lost.

I repeat it, when a strong reconnoissance is made, troops should always be arranged in such manner as not to be forced to accept a serious battle; but, at the same time they should be in relative position, either to reassemble the troops engaged, if they are beaten, or to profit by a fortuitous and favorable circumstance. Whatever consideration is entertained for an adversary, he should never be thought infallible; fortune often smiles at the moment when we least expect it; and we should always be prepared to prove to her that we are worthy of her favors.

CHAPTER V.

DETACHMENTS IN PRESENCE OF THE ENEMY; THE PROPER TIMES FOR MAKING THEM, AND THE DANGERS WHICH ACCOMPANY THEM.

Sometimes a general, too much preoccupied with the idea of a success for which he hopes, makes in advance, without having beaten the enemy, arrangements for giving a grand result to victory. To this end, he divides his forces and launches them in different directions. Instead of conquering, he is beaten. The detachments he has sent out are captured or destroyed, and a campaign opened under favorable auspices, is now but a succession of reverses.

I will cite several examples in support of my assertion.

In 1796, in Italy, Wurmser enters upon the campaign with an army superior to that of the French; a column turns the French flank, and marches by Brescia, upon their communications. This column, too weak to resist the united French force, retires upon its approach. Separated from the greater part of the army, by the mountains and the Lago di Guarda, it is ignorant of the events which are transpiring; and the French army, placed in the centre, beats, one after the other, all the corps which successively present themselves.

In the same year 1796, General Alvinzi debouches from

the Tyrol, and attacks the French army, occupying the chain of Monte Baldo and the Corona. Believing a victory certain, he detaches a body of 5000 men, commanded by Colonel Lusignan, who, after having followed the border of the Lago di Guarda, changes direction, approaches the Adige, and takes position in rear of the French army, and on its direct line of communication. This corps is held in check by the weak division of Rey, who, having rejoined the army, established himself in front of it. The battle was gained by the French army; and the corps of Lusignan attacked, routed, and almost entirely captured.

In 1800, Napoleon debouched into Italy with an army of 60,000 men. Having crossed the Po, and completely turned the Austrian army, he found himself upon their lines of communication, with the design to take possession of all the roads by which they might attempt to retire.*

To achieve that, he placed on the Tessino a part of his force on the right bank of the Po, while, of necessity, he sent upon the Adda and Oglio one division to cover himself in that direction. Then, supposing that the Austrian army, united, would desire to make its retreat upon Genoa, he detached a division in the direction of Novi, to shut that route against him. There only remained to him 22,000 men, and the enemy had 45,000 united on the

* There remained to the army which fought at Marengo, only the corps of Victor, formed of the two small divisions Gardanne and Chamberlac; the corps of Lannes, composed of the divisions Watrin and Monier; the division Boudet, 5000 strong; a very weak cavalry, and thirty-two pieces of artillery.—M.

Bormida. The enemy attacked him; the battle of Marengo was fought; obstinately disputed, it seemed lost at five o'clock in the afternoon, when the division detached toward Novi arrived. General Desaix,* who was at its head, had wisely halted it, on hearing the cannon of the battle, to await orders. He retraced his steps, and arrived in time to act as a reserve, and the battle was gained, although only 27,000 men had been at one time in action, and 22,000 had been forced to bear the entire weight of the battle. Thus our forces engaged were, on this occasion, only two-thirds of the enemy's force; and it was a bare chance that made them more than one-half. A splendid victory doubtless, the results of which were immense; but it would be dangerous to take as a model the strategic combinations which led to it; for it ought to have been lost, on account of the superiority of force and the means which opposed us.

If victories are possible under such conditions, we should not too much count upon them. We should doubtless display all the more energy in proportion as the circumstances are less favorable; but unwonted sanguineness must not give birth to them.

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* Desaix and Kellermann retrieved the fortunes of the day.

"Simple, timid, even awkward, his face always hidden under his long and flowing hair, Desaix had not a military appearance; but heroic under fire, kind to his troops, modest among his comrades, generous to the vanquished, he was adored by the army. * * * His mind solid and profoundly cultivated, his knowledge of war, his attention to his duties, and his disinterestedness, made him an accomplished model of all the warlike virtues."—THIERS, *Le Consulat et l'Empire.*

In 1813, the French army of Silesia, more than 80,000 strong, united at Goldsberg, commanded by the Marshal Duke of Tarentum,(Macdonald,) was opposed by an army nearly equal, commanded by Blücher. The Duke of Tarentum advanced upon the enemy, whom he supposed to be in force at Jauer; at the moment of moving he detached the division Puthod, to march through Schönau upon Jauer, to find the enemy and to take him in flank.

But Blücher at the same moment assumed the offensive on his side; the French army, badly informed, met the enemy unexpectedly near the Katzbach, and was obliged to accept battle without having united its forces. Bad combinations and a series of misfortunes led to confusion. The French army was beaten, and forced to fall back, the division Puthod lost its communications; cornered at Bober, outflanked, overpowered by numbers, after having fought valiantly, it was taken almost entire.

There result from the foregoing examples, and from many others which I might add, the following conclusions:—

1. Nothing is more dangerous than to make an important detachment, before having given battle, gained a victory and acquired a decided ascendency over the enemy.

2. The execution of such a hazardous combination requires that an army should have a sufficient superiority to give great probability of victory: and its strength should never be so weakened as to be less than that of the enemy in front.

3. When we are at a distance from an enemy, who is

strong enough to offer us battle, and are marching towards him, we should occupy, by advanced guards and light troops, at least the space of a day's march distance around us, so as to be informed of his movements and modify our own in consequence.

4. Finally, when we think proper to make a single detachment, its direction must be determined, and succoring troops placed in such a manner that it will always have an assured retreat upon the main body, and can in no case lose its communication.

CHAPTER VI.

BATTLES.

To treat in detail of the dispositions which the **conduct of a battle** requires is impossible: a thousand unforeseen circumstances force us to modify them; fortuitous accidents occur to change our whole economy. I will limit myself then to recalling and stating the rules to be followed, and the principles to be respected, to prepare a battle and to distinguish its proper character. As to the **manner of giving battle,** nothing can be more variable. It differs according to the nature of the operations to be executed, and the kind of mission which the army has received. It varies with the composition of armies, and the special character of the troops; it varies also by reason of the talent and the kind of faculties possessed by the generals who command.

I shall enter into very few technical details as to the formation of troops, and the preliminary plans; for these dispositions depend particularly upon the nature of the ground on which the battle is to be fought. Thus, for example, it is evident that a position near a field of battle which may serve for a base and support, should be occupied in force, and in such a manner as to exercise a salutary influence, whether we attack or defend. The strength

of a position supplies what is wanting in the number of troops: defiles placed in front render a part of the means of defence superfluous, and the means of attack more difficult. As to the rest, the simplest reasoning—often instinct alone—suffices to make us feel the modifications necessary in those formations established by usage. I will state, in few words, that, all local influences apart, there has been adopted, as a fundamental principle, the formation of troops on many lines. The first line deployed, the second in column by battalion, at deployment distance, ready, if there is need, to march or to form into line; and a third line, composing the reserve, in column by brigades, ready to march wherever it can become useful

I will, however, make one observation upon general dispositions; it is that the command of troops should be devised so as to embrace the two lines at once; that is, that these corresponding parts be under the direction of the same commander. The reason of this is easily conceived. As the second line is destined to sustain the first, it is necessary that the movements of the corresponding fractions in the two lines agree perfectly. It is not the same with the reserve; it forms a complete and independent corps, which should have all its means united to act according to the circumstances; thus, a *corps d'armée* of four divisions, in disposition to offer battle, should have, in my opinion, the following formation:—

In the first line, three brigades of three different divisions, and in the second, the three other brigades of the

same divisions; and the fourth division in rear, entire, and formed in two masses, each of a brigade.

The cavalry should be thus placed:—that of the divisions, on the flank or in rear of their respective divisions, and the masses of cavalry formed in several lines, and on the flanks of the army, abreast of the second line; and, in preference, on the side where the country is most open and most favorable to its movements and its action.

As to the artillery, that constituting the reserve should hold itself in rear of the infantry reserve, ready to move wherever it should be needed.

Finally, I will add that the art of directing a battle well consists particularly in the judicious and timely employment of the reserves; and the general who, in a hotly-contested battle, has fresh and disposable troops at the end of the day, when his adversary has used all his, is almost certain of the victory.

I will now establish the character of battles, by dividing them into two classes: **defensive** and **offensive.**

For the first, the conditions of success are: the choice of a good position, the flanks of which are well posted, and the rear free and protected; obstacles, which render the enemy's approach more difficult, in front; finally, brave, disciplined troops, commanded by an energetic and determined man.

Offensive battles require, more than all else, good strategic combinations and skilful tactics: troops easily handled, good marchers, nimble, and intelligent, with a decided dash about them. The soldier must be ambitious of suc-

cess, as though it belonged to him personally, and he must associate himself with the idea of it in advance.

In applying these observations, which I regard as of rigorous importance, to the character of different armies, and in taking as examples troops which have the least resemblance, we observe that the genius of troops in these two conditions belongs eminently to the French, for offensive battles, and to the English, for defensive. If we observe, besides, that, in offensive war, the difficulties of administration and of the subsistence of troops are immense, while, in defence, only money and will are necessary; if we reflect, finally, that the English army, by its composition, its customs, its needs, requires, more than others, abundance,—we shall be more and more forced to the conclusion that defensive war, with all its consequences, is more in keeping with the faculties of the English army, and that it would be less easily waged by a French army.

The events of the war in the Peninsula, still present to our remembrance, demonstrate this truth. The English general, whether by his nature and his own character, or by his skill in seizing the conditions in which he was placed, comprehended, from the beginning, the system he ought to follow, and never departed from it.

For a long time he perseveringly made use of a powerful auxiliary which the force of circumstances offered him,—our misfortunes; he did not cease to make the most of them. His army, abundantly provided with everything, able to unite every day, had constantly the power of motion, was always threatening: military and political calcula-

tions alone gave motive to its operations; while the French army, abandoned to want of every description, and to labors of all kinds, was daily losing its means and its strength. If a position was impregnable, the English general occupied it, and waited until it was in danger of being turned, or until the French army should come to dash itself against insurmountable natural obstacles, consuming its valor in pure loss.

Thus, when Marshal Massena,* at the head of a superior army, threatened to invade Portugal, Wellington placed himself behind two strongholds, and, covered besides by the Coa, he waited until the French army had exhausted a part of its means in two sieges; abandoning to the fate of war the garrisons of these two places, which did not belong to his army, he retired, when they capitulated, and when he might fear being attacked himself, to go and take position at Busaco. After having repulsed the French army which attacked him inconsiderately, he withdrew and disappeared, when it was manœuvring to turn him, and the English army retired into the lines of Lisbon,† where art had aided nature with powerful means of resistance. (1810–11.)

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* Andrea Massena, born at Nice, 1758; at the age of 17, a private in the Royal Italian regiment; passed through the grades of corporal, sergeant, lieutenant; retired from the army in 1789. General of division in 1793, and renowned for skill and bravery throughout the wars of the Empire. Such was his good fortune that Napoleon called him the "favored child of victory" His great fondness for money has been much censured. He died in 1817.

† These are commonly called the lines of Torres Vedras,—fifty miles of fortifications enclosing Lisbon. Nothing else could have

The English general waits patiently for famine and misery to disorganize and destroy the French army; he follows his system in a manner so rigorous, that he allows them to remain unattacked, although they are in sight and within range of his guns, and not in condition either to offer battle or oppose a serious resistance, weakened as they are by the absence of fifteen or twenty thousand men, who, leaving their arms stacked, range fifteen or twenty leagues, seeking provisions in the interior of Portugal. Reduced to nearly one-half, the French army returns into Spain, after having abandoned all its guns, all its *materiel*, for want of horses to take them away; and three-quarters of its cavalry are on foot. It has experienced immense losses, although it has not fought, except at Busaco, and has only had during the retreat two combats of small importance.

Wellington always followed an analogous system; and when later, at Waterloo, he found himself confronted by Napoleon, it was again a defensive battle which he fought.

We see then that, in a defensive war, which is always a question of time, battles must be rendered as rare as possible, because marches and various circumstances injure and sometimes destroy the means of an adversary, more certainly than the most signal victory could do.

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saved Wellington's army from the most disastrous defeat. Once within these lines, the English were plentifully supplied by the Tagus and the sea, while Massena, without supplies, was obliged to retire, after ineffectual attacks.

As to the particular circumstances of defensive battles, they should always be delivered in front; and the talent consists in forcing the enemy, by dispositions wisely conceived, to attack where we have been able to prepare the easiest resistance. But there are also battles which, beginning with an offensive movement, are reduced, in the action, to a defensive combat; this is what happens when prudent and circumspect generals, placed at the head of forces nearly equal, wish to bring on a battle.

In 1812, an example of this kind was offered: the English army was superior to the French army by 8000 infantry and 4000 horse. The French general, after having been a long time upon the defensive, in expectation of promised succors,—having been informed officially that they would not be sent him, was obliged to assume the offensive, in order not to see, day by day, his situation growing worse.

But on taking the offensive, and, by strategic movements forcing the enemy to fall back, he did not wish, resolved as he was to fight, to renew by a rash attack the events which had taken place before. He desired, if there were a battle, that it should be delivered upon a ground of his own choice; that it should be received and not given. On the other hand, the English general, faithful to his system, equally proposed to himself to reduce the action to the defence of a position. Hence the remarkable movements which took place from the Duero to Tormes towards the middle of July, 1812.

This system being followed, on either side, the English

army was obliged to make a retrograde march. Its return upon the Aguéda, and its re-entrance into Portugal, would incontestibly have been the immediate result of that part of the campaign, if a movement had not been executed without orders in the French army, and if the marshal who commanded it had not received a severe wound three-quarters of an hour before the battle; from this, want of certainty occurred in the command which hindered the timely repairing of mistakes, and brought on an action which should not have been risked until later, and under better auspices. In spite of these drawbacks, the loss was equal in the two armies.

Although I firmly believe that French troops, well commanded and properly provided, are fit for all kinds of war, I think nevertheless that offensive war is more in keeping with the spirit, the nature and the character of our soldiers: it was especially the distinguishing characteristic of Napoleon's genius.

I have already said that no one ever possessed in a higher degree than himself strategic talent; and his offensive marches, until the Russian war, were skilfully conceived. The power of the means of which he made use, their energy, the moral force which animated them, his activity, the absolute freedom in his projects and his combinations, precipitated events, and in exalting the spirit of his soldiers, overwhelmed the enemy with discouragement in advance; and there is not much space between the fear of being beaten and a defeat. What a series of splendid operations, executed in a magical manner!

At his *début* in Italy, he turns all the positions and beats the enemy in detail, before they are able to collect their forces. He passes the Po without having the enemy before him, because he has prevented that by his movements. The war becomes defensive; but soon he changes its character, and, by attacking, he rediscovers the application of his own special genius.

In 1800, he enters Italy, and forces the Austrian army to receive battle in the most fatal position, with the most annoying conditions, after having lost its communications and its points of retreat.

In 1805, the direction of his armies alone, which he leads in mass upon the Danube, after having displayed heads of columns in the Black Forest, to fix the attention of the enemy, decides the question of the campaign; for if Mack,* instead of having brought upon himself, by a foolish confidence, the catastrophe of the Austrian army, had withdrawn, this simple movement would have placed us in possession of the whole of Bavaria.

At Austerlitz, it was a tactical movement which, in a few hours, settled the fate of the battle. At Jena, the same prodigies were effected by the same means. As long as this system was followed, similar successes crowned all the enterprises of Napoleon.

In 1809, at the opening of the campaign, before Ratis-

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* Charles, Baron von Mack, an Austrian general, incompetent and unfortunate. His capitulation of Ulm, here referred to, was foolish and cowardly. He was tried, and sentenced to death for it, but the sentence was commuted, and afterwards remitted.

bon, the same spirit directed his operations. But soon his system changed: the passage of the Danube, after having failed the first time, was executed with success, and followed by a battle gained on the plains of Wagram. Here it was a direct attack in front which constituted the battle. Moreover, circumstances did not allow him to choose. The passage of a river like the Danube is not an easy thing, and cannot be made secretly; and when an army, posted upon the opposite bank, wishes to contest it, we must resolve to fight at the moment of landing the first troops; then the accumulation of means and energy alone give the pledge of victory.

In 1812, it depended upon his own will to give to the great battle, which he fought upon the Moskwa, the character of his preceding victories. A simple flank movement would have permitted him to fight the Russian army with much greater advantages, by cherishing the chance of far greater results. But a decided taste for direct attacks already begun to manifest itself in him, a taste for the pleasure of employing force, and a kind of disdain for the concurrence of art and skilful combinations. He conquered, but with immense losses and unimportant advantages.

In 1813, his applications were varied.

At Lützen, being surprised, the battle commenced by being defensive, but it soon became offensive.

At Bautzen, the strategic movements were skilful and well conceived.

But, at Leipsic, we are fain to ask how Napoleon, who

had choice of the theatre of operations, could, of his own accord, have chosen a theatre so little advantageous, and which, according to the simplest calculations, must prove fatal to him? The battle of the 18th of October was defensive, and offered no chance of success, because the battle of the 16th had not been gained, and the enemy on the 17th had been reinforced by 150,000 men. He should by all means have avoided it, and withdrawn without delay.

In France, the battles of Brienne and Craon, that of Laon, that of Arcis, could not produce any advantage, whether in the concentration of force, or in the direction of the attacks; all the operations of this period were of necessity limited to partial movements, directed against separate corps. In these, all that could be done was to exercise the remaining energy of the French army; these combinations, moreover, belonged to the genius of Napoleon, who then made many happy applications of them, as at Champ-Aubert, at Montmirail, at Vauchamps, at Montreau, by giving to an obstinate defensive, an offensive character, which was the fundamental basis of his talents.

But, finally reduced to the necessity of a battle, by the reunion of all the enemy's forces, and compelled to fight, he was obliged to resume the defensive, to choose a position at Paris, to fortify it, to collect all his means and those of the capital, which alone could support him, and to make a last trial of fortune.

If 14,000 men, fragments of his army, abandoned to

themselves, were able — in an open country, without a single artificial work to support them, deprived of the succors which the city ought to have been able to furnish them, by the disappearance and flight of the higher authorities — to resist for ten hours the colossal forces assembled before them, of whom 54,000 were engaged and 13,000 put *hors de combat*, we may judge what might and ought to have happened, had the combatants numbered 30,000, under the protection of good works, which would have tripled their force, and aided by the means of Paris, the action and concurrence of which would have resulted from the presence and authority of Napoleon.*

But this kind of resolution did not belong to his genius; he did not wish to foresee it, nor to prepare for its execution; he had placed, in last resort, the lever of his power solely in opinion. But if this power of opinion is immense, its only durable effect rests upon the condition of being based upon something positive and real.

One word more upon offensive battles. At what hour should they be fought? This is a question worthy of examination, as it is of great importance.

When we have the choice, the hours should be varied according to circumstances. Have we a decided superiority, which authorizes a firm confidence in victory? The attack should be made early in the morning, that we may

* The reader is again reminded that Marmont was a participator in these movements executed by Napoleon in France in such a masterly manner in 1814. He was in command at Paris, and to him is due the gallant defence, against great odds, to which he refers without a mention of himself.

profit by the successes obtained. Every true soldier will recall the chagrin he has felt in the midst of success, on seeing the arrival of night; and the impatience with which it is expected in case of reverse.*

Again, the attack should be made as soon as possible, when we have all our troops in hand, while the enemy has not yet assembled his own. We ask in vain, why Napoleon at Waterloo, in the longest days of the year, only attacked the English at eleven o'clock in the morning, although he knew, by an intercepted letter from Blücher to Wellington, that the first Prussian columns could not join the allied forces until four in the afternoon; for, if Napoleon should be victorious, he would present himself to the Prussian army, after having beaten the English; and if his arms should be unsuccessful, he would at least avoid having upon his hands a second army in the midst of the combat.†

Great military questions may almost always be reduced to simple ideas, and the axiom here stated is that we have more chances of success in fighting one to one, than one against two.

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* The reputed exclamation of Wellington at Waterloo is a case in point;—"Night or Blücher!"

† Marmont had at this time accepted a position under the Bourbons, and his criticism is considered prejudiced. But Napoleon's friends have tried in vain to answer the question proposed. The muddy condition of the roads, which rendered the movements of cavalry and artillery difficult, has been alleged in defence. They could not have dried much by eleven o'clock, and the splendid charges of Milhaud's cavalry disprove this excuse. The truth is, his conduct here is in keeping with the singular irresolution manifested on the few previous days.

But when forces nearly equal render victory uncertain, it is better to attack towards the middle of the day; the consequences of a reverse are less formidable, and a general must above all think of the preservation of his army. The destruction of the enemy holds only a secondary place in the order of duties and interests. Moreover, if the question remain undecided, we have the whole night to prepare a new attack and other combinations. Besides, the troops are well rested, they have been able to breakfast before the combat; they are in conditions of force and energy. On the contrary, the defensive army, preoccupied and agitated, cannot give itself up to such complete repose, and often sees its morale injured in proportion as the moment of action approaches.

In the midst of our triumphs in Italy, two slight reverses had occurred on two succeeding days, at Cerea and Alle Due Castelli, in consequence of the extreme fatigue and a little disorder which existed in Massena's division. As it was important not to let Wurmser come out of Mantua, and to guard against a new check, the troops were rested until noon; they only took arms after their dinner, and the victory of San Giorgio was not for a moment doubtful.

To sum up:—defensive battles belong more to war as a profession; offensive battles, well planned and well conducted, are the appanage of genius. Such was the true character of the wars of Frederick II. (the Great,) for the great defensive war of seven years almost always had an offensive character; and, in this respect, his cam-

paigns strongly resemble many campaigns of Napoleon, with the simple differences of the period and the state of military science.

In attentively reading the narrative of the action of great generals, we may recognize the kind of troops which they have commanded, by the manner in which they have employed them. We may even recognize their own character; for it must be admitted that those who have excelled in a particular kind of war had a special genius for it. Natûral instinct, if not our best guide, at least powerfully contributes to develop our faculties.

In all ages, great generals have impressed upon their operations an individuality; the same operations, conducted by men whom we most frequently compare, present, upon reflection, essential differences. The campaigns of Turenne and the great Condé are not at all similar; and it is the same, in antiquity, with Alexander, Cæsar and Fabius, Hannibal and Scipio.

A skilful general must, then, on entering upon a campaign, possess himself thoroughly with the conditions in which he is placed, by the nature of his troops, their number, the object assigned to him, and the means at his control; and he must provide, even though contrary to his own taste, the best modes of employment which it is proper to give them.

CHAPTER VII.

THE CONDUCT OF A GENERAL THE MORNING AFTER A VICTORY.

Generals who gain battles are less rare than those who know how to profit by victory. It is sometimes said that the battle is the aim, while in reality it is only a means. This is to be remarked particularly in the wars of former times, but in our own times even examples have not been wanting.

An ordinary general is only struck by the losses he has experienced, and hardly has a suspicion of those of the enemy; hence arise fatal indecision and timidity, instead of confidence which everything would authorize.

In 1795, Schœrer, after the battle of Loano, could, without a serious engagement, have invaded Italy. In the same year, Clairfait, after his signal victory before Mayence, could have arrived under the walls of Strasburg, if he had marched without delay. In 1800, Moreau, by rapid movements, could have completed his successes at the opening of the campaign. The same year, in Italy, Brune, after crossing the Mincio and the Adige, could have destroyed entirely the Austrian army, which was retiring before him; so favorable were the circumstances, that the least energy would have sufficed.

Napoleon is the first, in our epoch, who has drawn from victory all the consequences of which it is susceptible.

After gaining a battle, he marched with rapidity in pursuit of the enemy, in order to obtain easy successes, and to rob him of the little confidence which remained. With such a system, a new battle was rarely necessary in order to attain an important end.

Doubtless in such marches a general is not much occupied with providing for the wants of his army. Disadvantages result from this, but much less than the advantages which are assured. As, moreover, the march is generally through a fertile country, amidst a compact population, the sufferings of the soldiers are thus moderated; that rapid march is soon ended, and an important pledge, with immense resources, falls into the hands of the conqueror. Then abundance and rest give power to repair losses, and, besides, to augment the means of progress. Whenever Napoleon made war in Germany, he acted thus and was successful. Vienna, twice occupied, furnished him incalculable resources, and gave a pledge which was of great value in the subsequent negotiations.

But there is a limit which cannot be passed with impunity. When this system of war was applied to Russia, it was no longer a question of ten or twelve rapid marches, in a country filled with resources, and in the midst of a gentle population, accustomed to respect rules and to obedience; it was an offensive movement of nearly three months,* almost without halting, in a poor country, offer-

* Passage of the Niemen, the 23d of June; entry into Moscow, the 14th of September. The movement consumed eighty-three days.—M.

ing the weakest resources, and a population often hostile; and the object of this movement was not to pursue a conquered army, but to reach an army which was falling back upon its own means, while we were using ours in marching only, by sufferings of every kind to the soldiers;* sufferings which soon engendered a sort of disorganization. Napoleon was thus running upon certain loss.

If then it may be laid down as a great principle in war, that a general should endeavor to profit by his successes, and neglect nothing to complete them, by the rapidity of his movements in pursuit of a vanquished enemy, it may also be seen that there are limits to this rule, and that its application should be subordinated to special circumstances.

But if a serious pursuit is to be undertaken, compact and powerful means should be devoted to it, means capable of surmounting all obstacles. Otherwise, by being forced to halt in the midst of the undertaking, we allow the enemy to recover his *morale*, and permit those advantages upon which we had a right to count to escape us.

After the battle of Wagram, Napoleon gave me, on the 8th of July, (1809,) the command of one of the advanced guards of the great army. Massena was following the main body of the enemy's army, which was retreating by the Hollabrun road. I was thrown forward upon the

* The first corps, at the beginning of the campaign, was 80,000 strong; at the review in Moscow, it numbered 15,000.

The French cavalry of the line had, on entering upon the campaign, 50,000; at the review in Moscow, it had 6000.—M.

Nicolsburg road, in pursuit of Prince Rosenberg, who was marching in that direction; and Marshal Davoust received an order to support me with his corps. I overthrew the troops in my front; and as they changed direction, abandoning the road into Moravia, by marching upon the Laa, to cross the Taya there, and to join the main body at Znaim, I did so likewise.

On the evening of the 9th, when I reached that river, I received a message from Marshal Davoust, who wrote to me from Wilfersdorf, that if I needed assistance, he was ready to join me. I had encountered but little resistance from the enemy, and nothing authorized me to think that succors were necessary; I therefore gave no invitation to Marshal Davoust.

Moreover, I thought that as no force had marched upon Nicolsburg, Davoust would abandon the design of directing himself upon that town. Everything happened differently from what I had been led to believe. Davoust marched to Nicolsburg, to supply his troops more easily; and I marched to Znaim, where I expected to encounter only a rear guard, and to be able to unite with Massena. But the enemy's retreat had been slower than I thought; two-thirds of his army were still on this side the river, with almost all their *materiel*, and one-third was immediately in my front. I took a defensive position to resist their efforts, and this position sufficiently near to Znaim acted also upon the retreat of the enemy's army, at the crossing of the bridge over the Taya. In spite of his repeated efforts, he could not dislodge me. I did not,

however, the less perceive the mistake I had made in not calling upon Davoust, and that which he had made in not coming spontaneously to my support. The retreat of the enemy would have been cut off; and the mass of his troops, obliged to retire by difficult cross roads, and to ascend the Taya, would probably have incurred the loss of a great portion of their *materiel*, and thus his disorganization would have been brought about. Such a success might have had incalculable consequences.

Succors deemed superfluous should not be summoned, but those which are offered should never be refused; for often a chance occasion gives them an unforeseen value.

CHAPTER VIII.

OF RETREATS.

It is not without justice that great praise has always been accorded to **retreats** made in presence of a superior enemy; this is one of the most delicate and hazardous operations of war.

The principal difficulty lies in the *morale* of the troops, which becomes much impaired in these circumstances; it is a singular thing, — the different impression produced upon the soldier, when he looks the enemy in the face, and when he turns his back upon him.

In the first case, he only sees what really exists; in the second, his imagination increases the danger. A general must then inspire his troops with pride and a just confidence, and present these sentiments to them as a powerful means of safety.

The soldier should be made to comprehend, that if he scorns the enemy, the enemy will respect him. In ordinary circumstances, when a general finds it necessary to retire at the approach of the hostile army, and nothing requires him to prolong his stay in the place he is going to leave, reason and prudence demand that he commence his movements before the enemy is in sight. By allowing an interval of two leagues at least, he gives to his march more comfort and facility. But there are circumstances

in which it is specially important to retard the enemy's march, to cause him to lose time by forcing him to make dispositions for attack, which suddenly become superfluous, because we withdraw at the moment when the battle seems ready to begin. Then are needed, at the same time, excellent troops, and great precautions on the part of the commander. It is in an arrangement by echelons, and great precision in the movements, that security is to be found.

If the retiring corps be so disproportioned to that which follows it, that it cannot hazard a battle, it may still, with prudence, sustain partial combats without danger. To this end it should prepare its movements beforehand, in such manner that there shall be no embarrassment among the troops, and that their march may always be light and easy. The general will place with his rear guard sufficient artillery, but not too much; it should be well served, well manœuvred, and some of the pieces should be of large calibre. This artillery, divided into two or three parts, placed in echelons, will march with facility, and will prepare successive and instantaneous points of resistance. The enemy is thus forced to halt in order to make his dispositions before attacking, and at the moment these dispositions are completed, the movement is resumed and the rear guard disappears. Then the enemy advances again; but he is kept at a distance by the fire of the artillery, which he soon discovers to be superior to his own; for the pursuing force lengthens out its columns, while the other, by retiring, constantly

carrries away the field of battle, and draws nearer to its reserves.

Hence there is a continual alternation in the respective strength of the troops in contact.

On the 25th of February, 1814, I executed a movement of this kind successfully. I was operating upon the left bank of the Aube, and my corps was composed of about 6000 men of all arms. The Prussian army, commanded by Marshal Blücher,* and 45,000 strong, crossed the river at Plancy, and marched against me. I took position on the heights of Vindé, in rear of Sézanne. Appearances were such as to cause the enemy's general to believe that I had resolved to fight. He made complete dispositions to carry the position, and placed about thirty cannon in battery. That moment having come, all my forces broke up in good order, well together, and with celerity, and the enemy started in pursuit; but in the march, which lasted the whole day, things worked in such manner that he was always kept at a distance, and forced frequently to halt to reunite his forces when he had been

* Lebrecht von Blücher, Prince of Wahlstadt, Field Marshal of the King of Prussia, born 1742; major in 1793, and fought with distinction in numerous battles on the Rhine; major-general 1794; fought at Auerstädt, 1806; defeated the French marshal, Macdonald, at the Katzbach, 1813. In the same year repulsed Marmont at Möckern; was highly distinguished for his movements in France in 1814, here referred to; repulsed and beaten by Napoleon at Ligny in 1815, and arriving at a decisive moment at Waterloo, to the assistance of Wellington, insured the victory. His great energy and promptitude gained him the name of *Marshal Forwards.* Died 1819.

too rapid. I arrived at Ferté-Gaucher, all the time exchanging cannon shots, and took position behind Morin; I had lost no men, except those struck by the enemy's balls, and I had not left behind a single living man, nor a piece of artillery.

The morning after the battle of Brienne, I was charged by Napoleon to withdraw upon the Voire, to take position at first at Perthe, in order to attract the attention of the enemy as long as possible, and thus to make a diversion in favor of the mass of troops who were retiring upon the Aube, by the bridge of Lesmont. After having paraded my forces at daybreak, and prepared my retreat in such a manner as to secure it, I executed it without loss, under the guns of the enemy; I passed the defile of Rosnai, without disorder and as if on drill, before the army of the enemy, almost the whole of which was directed upon me; it was unable afterwards to cross the Voire, which it tried many times to do in vain.

If the retiring army is of sufficient strength to measure itself with the enemy, analogous dispositions are made. Its safety lies still in the manner in which the echelons are placed, and the aim is always the application of the fundamental principle established above — to be more numerous than the enemy, at the moment of combat, on the field of battle.

The best disposition in such a conjuncture is this: — to retreat with the army very early, leaving a strong rear guard, which should retreat as late as possible without compromising itself; to take position in a defensive place,

at such a distance that the enemy can only arrive three hours before sunset. However anxious to fight, he has not time to make his preparatory dispositions, and if he attempts the attack before completing them, he ought to be crushed, for the encamped army has all its forces united, while he necessarily has only a portion of his own.

It was thus that in 1812 the army of Portugal, very inferior to the English army, withdrew while in its sight, from the banks of the Tormes, to go and take position on the Duero, from which the enemy made no attempt to drive it.

In 1796, when General Moreau* evacuated Bavaria, to retreat upon the Rhine, followed by the Austrian army, he put this theory in practice; pressed too closely, and marching with his forces united, he halted, gave battle, and gained a victory.

But if an army in retreat, or even a single rear guard, finds upon its route an impregnable position, which the enemy cannot carry except by turning it at a distance,

* Jean Victor Moreau, born 1763; at first a lawyer; became a soldier at the outbreak of the Revolution, 1789; brigadier-general in 1793; general of division, 1794. His revolutionary sympathies received a severe shock by the execution of his father at Brest, by the Jacobins. Commander-in-chief of the army of the Rhine and Moselle in 1796, and defeats Wurmser; distinguished in Italy, 1799; commanded the northern army against Kray and the Archduke John in 1800, and won the battle of Hohenlinden. Opposed Napoleon and conspired against him in 1804; was exiled, and lived some time in New York; in 1812, accepted a position on the Emperor Alexander's staff, and was killed at Dresden in 1813.

they should always occupy it during the entire time they can remain without danger; if the enemy manœuvres to cause them to evacuate it, his operations are delayed, and time is everything for the defensive. If the enemy, in his impatience and ardor, attacking suddenly, rushes upon material obstacles, an easy victory will be gained, and one sometimes very destructive to the enemy, and susceptible of considerably changing the relations of the *morale* of the two armies.

This is what happened in Portugal, on the 27th of September, 1810. The English army, inferior to the French, took post on the 26th, upon the mountain of Busaco, counterfort of the Sierra of Accoba. The right of the position, which was impregnable, barred the road, while the left, connected with higher mountains, was of easy access. Massena, whom the Emperor had recommended to profit by his superiority to force the enemy to accept battle, resolved upon an immediate attack, and, unfortunately, without having sufficiently reconnoitred the position occupied by the enemy along his entire front. After unheard-of efforts, the corps of General Reignier succeeded in scaling the mountain under the enemy's fire, but, coming upon the plateau, and finding the whole English army drawn up, it was easily overthrown; it lost in a few minutes the ground it had painfully and courageously gained during an hour. Six thousand men were put *hors de combat.* The next morning, seeing a movement of the French army by its right, the English army disappeared. The result of this unfortunate combat

changed the *morale* of the two armies, and diminished on our side that blind confidence so necessary to success, while it reinspired that of the enemy. Had this event not happened, an attack upon the lines of Lisbon would probably have been attempted, and had that succeeded, the success would have terminated the war in the Peninsula.

CHAPTER IX.

NIGHT ATTACKS AND SURPRISES.

No theory can be made concerning **surprises**. Surprises ought to be impossible of execution in the day-time, and would always be so if every commander and every soldier did their duty with exactness and intelligence; but sometimes things happen otherwise. When the enemy is surprised, it is a good fortune by which we should know how to profit; for nothing promises a prompt and easy success more fully than this.

Troops which are in the order of formation exacted by circumstances, troops which know that they are about to fight, which are animated by the sentiment of their strength, by confidence,—troops of this nature attacking a surprised enemy, in no way prepared to resist them, have such advantages over him that they have the right to count upon victory.

Very good troops, animated by an excellent spirit, commanded by a general skilful and prompt in his resolves, may sometimes escape a catastrophe under similar circumstances; but it is equally true that such troops and a general possessing these qualities will never so conduct themselves as to be placed in such a condition.

It is entirely otherwise with **night attacks**; there cannot be surprises, in the proper acceptation of the word;

but there are sudden attacks which nothing could have foreseen, and there may be ignorance of the true dispositions of the enemy, because one cannot be aware of his presence during the night, except at a very short distance, when armies are near each other.

It is only in the case of extreme proximity that I believe such an enterprise to be possible; for if it were necessary, before attacking, to pass over a great space, there would be many chances that the different columns, at the moment of action, would not be in harmony with each other.

It is then, I repeat, when two armies are very near to each other that such an action can be performed; but in this only a moderate force should be employed; the attack should be made upon many points at the same time; above all, the attempt should be made to throw the enemy into disorder; if we can do that, we obtain the results of a victory, without having purchased it by great sacrifices, and we are ready to profit by it, if, later, the condition of things offers us the opportunity.

It is principally against tolerable troops and weak discipline that we ought thus to act. If in the midst of the uncertainty of a true attack, such troops are put in motion, confusion soon springs up among them; sometimes it even happens that the different columns mistake and fire into each other, to the entire profit of the assailant, who is only a spectator; he who attacks, only employing a part of his troops, after having fortified them with precise instructions which determine the sphere

in which they are to operate, and having made them understand the ground and the direction of the other columns, runs a much less risk of falling into errors. We have more than once seen columns of the same army, operating at night, mistake each other respectively for the enemy, and do each other much injury.* If simple chance may produce such accidents, we may conceive it possible to contribute to their production, and then the accidents will be still graver, because the presence of the enemy is real, and his action may be joined to that of chance in a direct manner; it is therefore well, when circumstances are very favorable, sometimes to attempt night attacks; to employ in them at first a limited number of troops, who will seek to render themselves masters of certain important points, and to be in readiness to overwhelm the enemy with all available means, as soon as day shall have dawned, if we may thereby promise ourselves great advantage.

The finest example of an attack of this kind is the enterprise executed by the Austrian army against the Prussian army at Hochkirch, on the night of the 13th and 14th of October, 1758. The two armies were very near. Marshal Daun skilfully planned the attack, which General Laudon executed with great vigor. This enterprise was favored by the blind confidence of the great Frederick, who did not perceive the dangers by which he was

* Witness the affray in which the Austrian army was engaged at Karausebes in 1789, under Joseph II. The different columns, mistaking each other for the enemy, during the night, fired into each other, and put 6000 men *hors de combat*.

threatened. A sudden attack, in several columns, made the Austrians masters of the great battery of the Prussian camp. They fought with energy until ten o'clock in the morning, and then the Prussian army was forced to retreat; this it accomplished in good order, and without being pursued, after having lost almost all its artillery. To effect even this required just such good troops and the *prestige* of the name of the great captain who had thus been beaten.

But if the circumstances which permit an enterprise of this nature are rare and delicate, if they should be carefully meditated upon, there are others in which there should be no hesitation, and which, without disadvantage, even in case of failure of success, give, in the event of success, very important results.

If beaten troops, in retreat, inconsiderately take a position too near the pursuing enemy, in the evening, and without being protected by material obstacles, these naturally constitute very favorable circumstances; then a night attack, made with a few troops, and conducted with vigor and intelligence, would be very proper.

The evening of the battle of Vauchamps, I had the good fortune to apply this principle with great success.

On the 14th of February, 1814, after the bloody affray of the morning at Vauchamps, which cost the Prussian army 4000 prisoners, the enemy began to retreat; my corps pursued him with ardor, and I succeeded in surrounding his rear guard, composed of a Russian division, with my cavalry, increased by a reserve of that arm

which Napoleon had placed at my disposal. This Russian infantry bravely resisted the charges directed against it, and continued its march.

Arrived at Etoges, and night having come on, covered by the forest through which they had passed, they halted, and made arrangements for establishing themselves there. I had received orders from Napoleon to halt at Champ-Aubert, and take position; but I knew the ground well, having only left it the evening before; and knowing that the position of Etoges was as bad for the enemy as it was favorable for us, foreseeing, too, that as soon as the morning came I should be charged with covering the movement which the Emperor was going to make to bring together the corps which were manœuvring in the basin of the Seine, I thought it necessary to hasten and try a sudden attack upon this force, and not to wait until he should evacuate Etoges before replacing him there. I brought together eight hundred infantry; I formed them in columns upon the high road, placing only fifty men on the right and left in the woods, at a hundred paces distant, to flank them; and, marching with them, I put this troop in motion in the most perfect silence, forbidding them to fire a single musket shot, but gave them orders to precipitate themselves upon the enemy as soon as they should reach him. It is three-quarters of a league from Champ-Aubert to Etoges; in half an hour we had reached the enemy's advanced posts. The Russian troops, occupied with preparations for the night, had dispersed, and only had under arms the main guards and the posts of obser-

vation. One charge with the bayonet put these to flight; we precipitated ourselves upon the village; and, in one moment, after having received hardly five hundred musket shots, the entire infantry and artillery, comprising nearly four thousand men, were in our power, as well as Prince Urusoff, who commanded them.

After a decided reverse, and a precipitate retreat, even if executed in good order, we should separate ourselves so far from the enemy on the evening of the battle as to be secured against his attempts of this nature; and, after a decided success, we should not hesitate to undertake a night enterprise against a beaten enemy who places himself imprudently within reach of the blows of his conqueror.

I now come to consider those **surprises** the aim of which is to seize a **fortified place**: enterprises of this nature have been often repeated; some have succeeded, others have failed, and although it is difficult to recognize precisely the circumstances which have produced these various results, we may nevertheless indicate them, at least in part, by seeking for the conditions which should have caused their success.

When such operations can be executed, we should not hesitate to attempt them; their success sometimes suddenly changes the system and the character of the war, and procures advantages much greater than a battle won.

It is ordinarily by means of sources of information established with inhabitants of the place, that the operations are made. Sometimes the influence of money is

sufficient to seduce them; but when religious or political passions hold sway, there is often a chance of finding individuals with characters which pass for honorable, who are disposed to serve you. There are also enterprises executed by the sole concurrence of stratagem, boldness, and courage, which succeed, the plan of which has been based upon a knowledge of the weakness and negligence of a garrison. In the number of the latter, I will place the surprise of Prague by the French army in 1741, which has made the name of Chevert celebrated; and the taking of Fort Mahon in 1756.

The fundamental principle of success in a surprise, whether it be favored from within or not, is promptly to make ourselves masters of an entrance which opens upon the country. The number of troops introduced furtively or by escalade will always be small; it can never increase as rapidly as the troops who are collected for the defence, nor promptly enough to be formidable to a garrison arrayed in the defence: the principal aim, therefore, should be to cause powerful succors to arrive as quickly as possible. When this condition is not fulfilled, if the heads of both garrison and commander are not turned, such bold enterprises must always fail.

But we should be well persuaded that even with the most favorable elements it is still possible to fail, if the garrison, thus surprised, is animated by an excellent spirit, and if the soldiers are endowed with great energy, which keeps them from calculating, at the very first moment, both the disparity of force and the present danger,

while they only think of the defence, and not of saving themselves. Then every soldier fights just where he happens to be; the smallest gatherings are effectual everywhere,—at the door of a house, the corner of a street, behind a wagon; they thus unexpectedly derange the enemy's combinations, by arresting the march of his first troops; and this is the beginning of safety for the place. Its chances increase every minute: other troops form in the same manner as the first, and soon the garrison is set up again, relieved from that powerful moral effect which the unforeseen always causes; it reunites, acts in combination, and comes victorious out of the struggle in which it seemed at first bound to succumb.

In such circumstances, the first soldiers placed by chance in the presence of the enemy should have only one thought, —the safety of the whole, and the glory which always accompanies a great act of self-devotion.

Never was a sentiment of this nature more energetically expressed or more brilliantly displayed than at the surprise of Cremona, on the 1st of February, 1702. Never did a more glorious event give lustre to the character of the French soldier.

Cremona was occupied as the headquarters of the army, and had a garrison of 8000 men. The great extent of the works, the negligent manner in which they were guarded, the security which reigned there, and a habitual forgetfulness of military duties, all of which were observed, gave to Prince Eugene of Savoy the idea of gaining possession of it, by surprise, and of making the garrison

prisoners. The discovery of an abandoned old aqueduct favored the enterprise; a priest who was won over, associated with some of the inhabitants, prepared the scheme: four hundred disguised grenadiers are introduced, and kept concealed in a church; other troops penetrate through the aqueduct. A postern, which had been walled up, is demolished during the night; six thousand picked men, at whose head Prince Eugene marched—the first general of his age—seem to take possession of the town; at length the enemy reaches the great square, (*place d'armes,*) and occupies the principal communications before the garrison is even alarmed. At the cry, "the enemy is in the town!" every man awakes and flies to arms; the fight is waged at every point. Marshal Villeroi is taken, all the generals except two are killed, wounded or taken prisoners, and the direction of the defence is entirely abandoned to the instinct of the soldier; voices which seem providential resound in every direction; they indicate movements and combinations which must result in safety; and those troops, surprised in their beds, naked, and deprived of their officers, seeking vainly to join them, fight furiously in the midst of this chaos for twelve hours, without eating, without drinking, and without clothing—and that in the depth of winter. At length they drive out the enemy who had assailed them, after having caused him to run the imminent risk of being taken prisoner himself. And nevertheless this enemy, commanded by an illustrious captain, made only this slight mistake in his calculations:—meeting a battalion which was about to take arms to go to drill,

and the delay in the arrival of succors, four thousand strong, upon which he counted, and the special object of which was to cut off the escape of the garrison.

We can conceive nothing more sublime. If in a condition so extraordinary and so unfortunate, a garrison could find its safety in its energy, we may judge what ought to happen, when a garrison does not abandon itself at the first sight of danger, and attempts to resist a feeble detachment which has penetrated into the work by surprise, and when the disproportion of numbers is so great between those who attack and those who defend: the resistance of one hour decides the issue; it sweeps away the effects of surprise, in themselves so powerful. We then come into the domain of the real, a thousand times more formidable than that of the imagination.

In our own time an analogous event to that of which I have just spoken happened, to shed lustre upon our arms. It is less known, but it is well to recall it to memory, and to transmit the circumstances to posterity.

When, in 1814, the events of that war had moved us away from the banks of the Rhine, Holland was evacuated, and immediately became hostile to France. English troops, under the orders of General Graham, were soon debarked to support the public spirit, and to give strength to the revolution thus begun.

General Molitor, on leaving Holland, placed garrisons in the most important fortified towns; but the condition of our armies at that time did not allow the detachment of many troops, and they could probably only be composed

of depot battalions.* The garrison of Bergen-op-Zoom, on account of the importance and extent of the works, was put at 4000 men. Those of the conscripts who did not belong to the old limits of France having deserted, it was reduced to less than 3000, and it was with this weak body that the brilliant feat of arms now to be related was executed; a feat as glorious for this handful of brave men as for General Bizanet, who commanded them, because on the part of the commander, the wisest and most far-seeing measures had been taken in advance, and more energetic ones still succeeded these, when the moment of action arrived. Here it was different from Cremona, where salvation was due solely to the obstinate courage of the soldiers. At Bergen-op-Zoom, the soldiers were eminently brave also, resolute, energetic, but it was especially by their subordination to the laws of discipline, and by their exact fulfilment of the orders of their chief, that they triumphed over the enemy.

The insufficiency of the garrison had determined General Bizanet to concentrate all the troops in the town, and to evacuate the exterior works, in the midst of which his small command would have seemed lost. He counteracted the disadvantages arising from this measure, as it concerned observation of the enemy's movements, by numerous patrols; he doubled the interior posts, and established numerous night pickets, always ready to seize their arms.

General Graham, who commanded the English in Hol-

* Less fit than others to take the field, and left in garrison on that account.

land, and who was at a short distance from Bergen-op-Zoom, being informed of the small number of defenders, thought he could carry it by a sudden attack, (*coup de main.*) He relied also upon the aid of the inhabitants, and had secret communications with the interior. He detailed for this enterprise 4800 men, and he chose for the attempt the night of the 8th and 9th of March, the anniversary of the birth of the Prince of Orange.

The assailant divided his party into four columns, designed to make four simultaneous attacks: the first two were to scale the ramparts — one between the Antwerp gate and the harbor, the other between the Antwerp gate and the Breda gate; a third was to present itself at the Strenburg gate, to make a false attack; and the fourth was to enter the town by the harbor, taking advantage of the low tide.

At ten o'clock at night, the third column surprised the advanced post at the Strenburg gate, but its progress was entirely arrested by the fire of the troops placed in a stockade to defend the stationary bridge.

The garrison flew to arms.

At the same time, the fourth column entered by the harbor without having been perceived by the guard-boat, and penetrated into the city. But troops sent against it having succeeded in dividing it, one part was halted, while the other part reached the rampart, where it was followed.

The second column had succeeded in its escalade, and was marching upon the Antwerp gate, to throw it open

to General Graham, who was waiting on the glacis with the rest of his troops and his cavalry. But a strong, reinforcing picket, sent in hot haste by General Bizanet to the Antwerp gate, prevented the English from seizing it, and the first column, failing in its escalade, was repulsed with great loss.

There were in like manner engagements in different directions during the whole night.

At the break of day, General Bizanet attacking with the remainder of his force, threw the enemy back upon the water-gate, and brought him to a stand: not being able to retreat, crushed by the grape of the exterior works, the English columns were thus obliged to lay down their arms, with a loss of 1200 killed, 600 wounded, (of whom two were general officers,) 2177 prisoners, (among whom were one general and four colonels,) 4000 muskets, four flags, a quantity of munitions, etc.

General Graham begged a suspension of arms for three days, to bury the dead, take away the wounded, and receive prisoners returned on parole.

All eulogium is superfluous after the narrative of such an action.

French blood has been famous in every epoch; our morals give extraordinary *éclat* to military glory, and this appreciation of the value of the sacrifice of life, sacrifice which public opinion alone can worthily recompense, has contributed much to develop in France the virtues of devotion,—safeguard of the power of nations. The army will not change so long as our morals remain

the same. Heaven grant, for the destinies of the country, that it may always be so, and that those dry and calculating minds who see the guarantee of social happiness only in material interests, and whose fatal aberrations prove a complete ignorance of the human heart, shall never exercise in the councils of the country a power and a credit which would tend to its destruction.

I search my memory in vain for examples of surprises of fortresses executed successfully against French troops. I have, on the contrary, met those which have transpired among foreign troops, and I will cite two which happened to the Prussians in the seven years' war: that of Glatz in 1760, and that of Schweidnitz in 1761.

General Laudon had, before his approach, established a system for obtaining information with several officers of the garrison of the fortress of Glatz, by means of the monks who lived there. Scarcely had the Austrians arrived before the place, when they opened their trenches, and being informed at what time the officers who were devoted to them would be on guard in the advanced fort of the Grue, a fort cut out of the rock, and deemed impregnable, they directed a strong attack upon this point; the besieged fled, and the Austrians, who followed them with ardor, entered pell-mell with them into the fortress. Ready reserves followed the first troops, and the Austrians were in possession of the place without having encountered the least resistance.

As for Schweidnitz, it happened thus: Five hundred prisoners of war were there, and among them an Italian

major named de Roca, a partisan officer; this officer knew how to get into the good graces of the commander, and was permitted to walk freely about the fortress. He soon knew the position of the posts and the details of the service. He intrigued in the town, and set to work to corrupt those who might serve him. Upon his representations, General Laudon conceived the project of surprising the place, which he executed on the night of September 30 and October 1. He distributed twenty battalions in four attacks. The commander of Schweidnitz was at a ball; but upon certain alarming indications he had made the garrison take arms, without, however, sending any one outside to learn whether the enemy was near; so that the Austrians even reached the palisades without being discovered. They surprised the Stricgauet gate; in the confusion the prisoners of war, having torn away the mask, took possession of the interior gate, and in less than one hour the town was taken, and the garrison were prisoners of war.

I will add two words concerning two surprises which were essayed in our days, but which did not succeed, solely because of the manner in which they were tried.

In 1796, when the French army was making ready to besiege Mantua, it was considered possible and very advantageous to carry, on the first night, the T work, by a surprise. This work, without revetment, covers a long curtain of the principal, which is only flanked by two large towers; it then constituted, and has still formed since the construction of the fort of Pictoli, which we built,

the best defence of Mantua on that side. The garrison was considered weak and exhausted by sickness; three hundred soldiers were dressed in the uniform of the garrison, and placed under the orders of an Italian officer, a deserter from the Austrian service, who was serving in our ranks; he was to feign a defence of the island in which the fort was situated, and to seem to be closely pressed by French troops, to throw himself upon the barrier of the covered way to seek protection there, to cause them to open to him, to seize that opening, and thus secure an entrance into the fort; but the officer of whom I have just spoken, who did not care to fall into the hands of the Austrians and be hung, was too gentle in the execution of his part, while Murat, who commanded the troops designed to aid him, acted slowly and with circumspection. The garrison, enlightened by this tardiness, were not duped by the comedy, which could only have succeeded through extraordinary activity and quickness.

The second was the enterprise made in 1800, on the Fort of Bard. Scarcely one hundred and fifty men composed the garrison. The assault which was made would infallibly have succeeded if it had been discreetly conducted. Colonel Dufour—a brave soldier, but entirely destitute of intelligence and incapable of reflection, charged with the command of the column which was to seize the gate—instead of approaching in silence, and noiselessly placing his ladders against the wall, which he should have scaled in a moment, bethought himself, like a fool, to have

the charge beaten before leaving the village. The garrison, warned, placed itself in defence; Dufour received a ball in the breast, and the attack was repulsed with considerable loss. It was this check which necessitated the bold enterprise of taking the artillery, by hand, under the same fort, during the night, in spite of the enemy's fire, and thus to pass the defile.*

* I have the right to claim for myself the merit of the conception and execution of that audacious enterprise, all the details of which I directed in person.

The First Consul only concurred in it, by authorizing me to try it; but justice imposes upon me the duty of associating with it the name of my chief of staff, then Lieutenant-Colonel de Sénarmont, an officer of great merit and valor, afterwards lieutenant-general, and killed before Cadiz. He contributed powerfully to success by the assistance he rendered me. This officer bore one of the finest artillery names, which his father had already rendered illustrious.—M.

CHAPTER X.

THE DEFENCE OF FORTIFIED PLACES.

The first element of resistance in a fortress, is to have a good commander; add to this first indispensable condition, a garrison of sufficient strength and full supplies of every kind—provisions, munitions, etc.—and you will be able to obtain the most extraordinary results. The fortifications may be more or less perfect; but this perfection, always desirable, is a small matter, if its effects be compared with those produced by the courage and resolution of the chief who presides over the defence.

The commanding officer of a fortress is its soul; it lives in him and through him. If at the commencement of a siege a garrison is poor, it will soon become good under a good commander; he will be able to awaken in it sentiments of honor, of patriotism and of glory, which sometimes slumber in the hearts of soldiers.

It is very fine to win battles; the *éclat* which redounds to the commander dazzles; success brings enthusiasm and admiration; but it is finer still—more meritorious, at least—to defend a place during a period which passes the recognized limits of defence.

The glory of a battle won, however brilliant it may be for the general, is always shared; that of a commander of a fortress is almost entirely his own. This glory is his

work; it is the fruit, not of a unique action accomplished under determinate circumstances, but of a long and uninterrupted series of persevering efforts, ceaselessly renewed, with the same certainty of their inutility, if timely succors do not arrive; the efforts of each day are not rewarded by the prospect of the delights of victory; they are always, on the contrary, connected with a painful sense of relative weakness, and they have not, for aim, to triumph over the enemy, but only to delay his successes, without changing the results.

Every man of sentiment always has courage and energy for twenty-four hours; in success, every man seems a hero. But how rare it is to find the same courage, the same tenacity, the same ardor, in reverses! It is only the truly brave who then display these qualities, and it is easy to count them.

But the commander of a besieged fortress is surrounded by conditions much more difficult still. It is necessary not only that he should possess and preserve a moral courage such as Providence has rarely granted to man, but even that this courage should increase in proportion as circumstances, becoming more difficult, would naturally lessen it; for he must counterbalance in the garrison the effect of sufferings and want which fall to their lot. The commander alone seems interested in the defence, because he almost alone receives the glory of it, while those who are under his orders only have its hardships. Thus, moreover, when a commander is disposed to surrender, he always finds himself surrounded by approvers

of this policy, and by officers disposed to raise scruples and doubts which have also occurred to his own mind; and when he calls the votes of a council assembled to decide whether the time to capitulate has arrived, the affirmative is always proclaimed, and it sometimes happens that those who protest against the surrender, would not utter this advice if their votes could change the majority.

Nothing is worthier of admiration than the defence of a place carried to extreme limits; but nothing is rarer.

Justice then requires that the names of those who have acquired such glory should be rendered immortal.

The most splendid defence known in the history of modern wars is that of Grave, on the Meuse, by de Chamilly, in 1675; nothing can be compared with it. That town had received the depots of the army, at the time of the invasion of Louis XIV. in Holland, and contained great supplies. Its extent is of moderate size; it had a garrison of 5000 men; it was defended for five months of regular siege; it resisted all the efforts of the Prince of Orange, who lost 30,000 men there, and Chamilly only surrendered upon an order signed by the king, carrying away with him all his artillery to the arms of France.*

* I was always ambitious to be placed in charge of the defence of a great fortress, having an internal sentiment that this task would not be above my powers. If I had been, I should have caused the journal of the siege of Grave to be reprinted, that every officer, non-commissioned officer and soldier might have had a model in his hands. If regiments are some day provided with libraries, it would be useful to place this work in them, worthy as it is of a soldier's greatest interest.—M.

After this admirable defence, we should place in the first rank that of Lille, and its citadel, in 1708. Marshal Boufflers, who commanded there, won immortal glory.

In our days sieges have been rare; we cannot, however, pass in silence the defence of the works of San Sebastian, commanded by General Rey, a long and obstinate defence which caused great losses to the English army.

The defence of the Fort of Burgos, under the orders of General Dubreton, which, attacked less powerfully, was still not without glory; and that of Wittemberg on the Elbe, by General La Poype.

But to set against a few extraordinary resistances which we most admire, how many moderate defences are there, judged with unmerited indulgence; how many culpable surrenders which remained unpunished!

The preservation of a fortress is so important and essential; it influences sometimes so powerfully the safety of an army and a country, that its surrender should always be an object of a legal investigation, which would force a clear statement of the circumstances accompanying the defence and leading to the capitulation. Then, the commander should be punished, or else rewarded and covered with unstinted praise.

The regulations for the navy prescribe the trial of every captain who has lost his vessel, in whatever manner the event may have happened. If he has done his duty, he is acquitted and honorably restored to service.

We understand this indulgence and this reservation in

the legislation, because circumstances of superior force may occur upon so movable an element as the sea, and be powerful enough to rule and master science, vigilance and courage. But on land nothing is variable; when surrender is not caused by the failure of supplies, there can be no legitimate excuse; we can only choose between praise and blame. Military regulations should be rigorously executed, and when a commander surrenders before there is a practical breach in the body of the place, and before having sustained at least one assault, there is crime on his part, and consequently there should be punishment.

I shall not enter into the technical details of the attack and defence of fortresses. Special works have treated of these matters in a complete manner. I shall content myself with a few reflections on the general direction to be followed in a defence.

In great fortresses it is too much the habit to make sorties at a distance before the beginning of the siege, and to exhaust a part of the means, forces and confidence, which are so useful and which it is so important to preserve until the moment when courage and valor shall be still more necessary. By going out to a distance from the fortification we lose our point of support; we are deprived of those succors which establish a sort of equilibrium between the garrison and the attacking army. I should advise, then, that in every case, unless there be a hope of thereby raising the siege, a sortie made with a large portion of the garrison should never go to such a distance

from the works as to be deprived of the efficient aid of the cannons of the fortress.

But if sorties of this kind should be prohibited, those having for their object the destruction of the enemy's works, as soon as commenced, cannot be too frequent, their chief aim being to arrest the enemy's movements and to gain time; this will be best achieved by giving him frequent alarms, and by often forcing sharp but short combats upon him, which require him to recommence the same works many times. In proportion as the enemy approaches the place, and the siege progresses, sorties made with smaller numbers—the field of battle becoming more and more restricted—should be still more frequent. In fine, it is at the moment when the close proximity of the enemy so often presents to commanders the idea of surrender, that the real defence should begin; and it even seems that it should never end, if every day new obstacles are prepared, if interior entrenchments are opportunely constructed; such dispositions should be made that the besieged should never be completely deprived of the fire of artillery, but should always preserve a few guns, well covered, for defending the breach. This precaution alone, which should be a matter of special concern, may control the destiny of the place for many days, and add very much to the glory of its defence.

I will close this chapter with an observation by which the commandants of besieged fortresses should profit. It is always against surprises that they should guard themselves; for the more improbable a thing, the greater the

effect it produces when it does occur. A brave garrison defends a breach, and the enemy cannot for a long time overcome its resistance; but if, at a moment when the attention of all is directed upon the defence of an open and assailed point, it is discovered that the enemy has entered the place at another point by escalade, then the mind becomes confused, the defence of the breach is abandoned, and the place taken.

Never, then, should the most exact watchfulness upon every point be relaxed; particularly should the eye be kept upon those points which seem the least easy to be attacked; for the enemy will choose them in preference, because seemingly able to defend themselves they will not be placed in charge of any force.

In 1741, the fortifications of Prague were the object of tumultuous night demonstrations, on the part of the French army, upon two points, and these demonstrations attracted the whole garrison; but other troops directed their march in silence upon a point in the body of the works enclosing the new town, which was at some distance; they carried with them a single ladder, crossed over the rampart, finding no one, opened the nearest gate, and the town was taken almost without a struggle with the garrison.

In our own days, in 1812, at Rodrigo, the garrison bravely defends a practicable breach made in the body of the place, and repulses the enemy; but fifty English soldiers escalade with ladders the castle, a dominant point, the scarp of which is revetted, and of great height; they

spread the alarm, give rise to disorder, and are masters of the town.

So likewise at Badajos. That city, besieged in the same year, is provided with a good garrison, commanded by a distinguished general, General Philippon, who had already sustained a glorious siege the year before. Entrenched against the breach, he there repels the assaults of the enemy; but the castle, the walls of which are eighty feet high, is escaladed by fifty men; alarm and disorder are spread around, and the city is taken.

Never under any pretext should this general oversight be relaxed; but there should be disposed, even in the places which seem most guarded against attack, some means of resistance, especially when a siege is begun, and when the enemy may and must suppose that all the means of defence have been concentrated upon the point to which he is directing his attacks.*

* I have not indicated in the number of remarkable defences that of Saragossa, by the Spaniards, because it is connected with a different order of events. An immense population, refugees of the province, with vast supplies, a population rendered fanatical by religion and patriotism, constantly more than double the number of the besieging force, and whose daily losses were almost imperceptible, by occupying those immense and indestructible convents, which are real fortresses, could and did arrest for a long time our efforts. But similar circumstances can hardly be renewed; that defence cannot furnish instruction which can be useful in regular warfare. As to the siege of Genoa, it was a splendid and grand operation of war, but the defence of an entrenched camp, not of a fortress properly so called.—M.

PART IV.

THE PHILOSOPHY OF WAR.

CHAPTER I.

THE MORALS OF SOLDIERS AND THE MANNER OF FORMING THEM; ARMIES IN FORMER TIMES AND ARMIES AT THE PRESENT DAY.

THREE things are necessary to give value to troops: the love of order, the habit of obedience, and confidence in themselves and in others. Such are, in their moral relations, the fundamental basis of an army. Without this basis, an assemblage of men has no consistence, justifies no hope, satisfies no want.

We should then in no degree neglect to develop these three elements in the minds and hearts of soldiers, to introduce into the morals of men of war those habitudes which I will call **military virtues.**

Discipline—that is, submission to rules and to the will of the lawful commander—must be unrelaxingly observed;

and each one, in whatever grade he may be placed, should always remember that he commands his subordinates only by the title of the obedience which he renders to his superiors.

Discipline, always severe for a grave dereliction, should, however, be measured in its applications.

In countries where elevation of sentiment, delicacy of manners, and dignity of character have banished corporal punishments, it is necessary, as far as possible, to introduce opinion into the punishments.

The French army particularly has always offered to an intelligent commander frequent occasions of utilizing this resource. Praise and blame, properly applied, the talent to excite a useful and noble emulation, have often been sufficient for all needs. Punishments and rewards, based upon opinion, have this marvellous characteristic,—that they are susceptible of infinite shades, and act powerfully upon generous hearts. Never should a punishment, whatever it may be—except for an act of flagrant baseness—be inflicted with an expression of contempt. Everything that degrades the soldier and brands him, diminishes his value, as everything which exalts him in his own eyes adds to his powers. There are a thousand means of varying the expression of these sentiments; a skilful chief chooses with discernment the means which best suit the kind of men he has in hand, and the circumstances in which they are placed.

In some armies severity is carried to excess in treating those faults which, to the eye of reason, seem trifling.

Without venturing to blame, I cannot approve the importance thus attached to them. Relating to certain details of dress, or to a momentary lack of steadiness under arms, too grave a punishment is unreasonable; but moderately inflicted, and looked upon in their relation to morals, the punishment has a good effect. The spirit of order, respect for regulations, are everywhere displayed; and it is as education, as a habit of life, that they should be regarded. A soldier in a soiled coat will doubtless fight as well as another whose uniform is perfectly correct; but, less exact in fulfilling his daily duties, he will probably be less obedient to the voice of his commander.

The life of an army is so astonishing, so artificial, that we cannot neglect, without danger, anything which contributes to give to its morals habits of order and of submission. But the commander must see the true aim, without exaggerating the importance of the means.

It is necessary that officers and commanders concern themselves, with particular care, to inspire confidence in their soldiers. Without this close bond, they can count upon nothing. In rest, in a state of peace, regulated power is easily respected and obeyed; but in the perturbations which dangers cause, everything becomes complicated, and the least natural obstacle may become insurmountable. It is then that self-confidence, and trust in others, those powerful internal voices, bestow an extraordinary energy which insures success.

The commander must then provide for the welfare of the soldier, must be willing, on important occasions, to share his

sufferings and privations; watch over the maintenance of order and discipline; punish when necessary, and eagerly seize opportunities of bestowing rewards—just rewards; for confidence in the justice of the commander is the basis of his credit and of the sentiments with which he is regarded. The instinct of the man is skilful to discover when a commander is worthy. Severity, then, has nothing which frightens or wounds, for it supposes force; and force, when it is the sincere interpreter of the laws, insures an efficient protection of rights. Even those who are the subjects of its action feel, at the bottom of their hearts, its utility and respectability.

As much as the maintenance of order should be, to commanders of every grade, a constant and ever-present thought, in just the same proportion should love for the soldiers be profoundly graven upon their hearts. I have already said this: how can they do otherwise than love that class of men, so deserving, so hardly treated in their entire condition, so habituated to privations, whose life is composed of so many sacrifices, who pass the best years of it in the midst of painful labors, dangers unceasingly renewed, and who so sincerely attach themselves to their commander, when they are loved by him! The soldier is good, by his very nature. If his education does not give him the right to be placed in the first rank of society, he would merit it by the sentiments which animate him. Habitual submission to regulations render him more moral still. A life of danger develops the noble instincts of his heart, and induces a constant devo-

tion, a sentiment inspired by Heaven itself. On his return to his fireside, the soldier is almost always a model to that portion of society in which he is called to live. I have seen him, in the midst of disorders and atrocities which war sometimes engenders, distinguish himself by acts of holy piety, of evangelical charity.* Shame and confusion to all who do not honor him, or who do not concur in every effort to ameliorate and soften his existence.

Another duty, which should never be neglected, is that of keeping soldiers in constant activity. Activity should be a second nature to them. Like almost all men, they are disposed to be lazy; it renders them the greatest service to change this disposition. Rest and idleness diminish their strength and lessen their courage. Health, energy and moral valor spring generally from a life hardened by fatigue and spent in movement.

Military drills are the first elements of that activity which I would enjoin; but they are not the only elements. In the first place, a soldier should acquire the most complete instruction; when he has that, to occupy him with

* I could cite many of these traits; I will only mention one. During the campaign in Egypt, a village revolted; a military execution was necessary as an example. The village was burned, and nearly all the inhabitants put to the sword.

A soldier, who doubtless had done his part in this cruel work, was struck with the sight of an infant who was stretching out its arms to him. He put it on his knapsack, took a goat to nourish it, carried the child for eight days, dragging the goat along, until he could find an Arab woman, who adopted the infant.—M.

the details of what he already knows, is an infallible means of producing in him an antipathy to his profession.

Great manœuvres, presenting a splendid spectacle, are the only things constantly to his taste; but new interests may be created for him, by exciting emulation in sports of different kinds. He may also be employed in important public works; and as a reward, the history of the regiments thus employed may be associated with the works they have executed by giving to these works their name. It is thus that splendid and great things might be accomplished economically, at the same time that there would be developed among the soldiers ideas of immortal glory and greatness, which cannot be too much fostered among men of war.

In the course of my military life, I have never permitted an opportunity to escape of applying this principle; and I have had cause of self-gratulation, not only as it concerned the immediate effect, but also in its influence upon the health and spirit of the troops. But I was careful not to pass certain limits, and in nowise to compromise a military spirit, the preservation and development of which should never cease to be the aim of every effort of a commander. Egypt, Holland, Dalmatia still present to our view those monuments of our past greatness, and of the then existing morals. In the latter country, eighty leagues of splendid roads, constructed in the wildest localities, in the midst of the greatest natural difficulties, have left to the inhabitants honorable remem-

brances which will be imperishable. Inscriptions cut upon the rocks yet announce to travellers that these works were executed by certain regiments and certain colonels. And when these brave soldiers, whose memory is so dear to me, laid down their picks and shovels to resume their arms, with what brilliancy did they display themselves on the battle-field! What strength, what energy did they not bring to bear upon the longest marches and the greatest fatigues!

Among the complementary means for the formation of troops, I will place in the first rank the establishment of great camps of instruction. These alone, during peace, can give to troops the habits and instruction which they need. Military spirit is only developed in the midst of the dangers of war, and such union of troops as present its image. Life in camp, the movements incident to it, the mingling of arms, that peculiar life from which civil society is so far removed, and which is the prime element of success and of glory, can only be created by assemblages of troops of some permanence and surrounded by comforts. I am not speaking of those temporary assemblages which are sometimes seen in different countries, the object of which is rather to present a spectacle than to give instruction and to develop the faculties; but of those camps of my youth, out of which sprang the finest and best army which has existed in modern times, and which, if it be equalled, certainly can never be surpassed: I speak of the army which encamped for two years on the

shores of the English Channel and the North Sea, and which fought at Ulm and Austerlitz.*

Supported by this example, and convinced by my own reflections, I would suggest that permanent establishments be formed in provinces which have but poor agricultural resources, like Champagne; and that durable barracks be arranged to receive 30,000 men.† The same troops should occupy them for three months at least. Three such establishments would suffice to give and preserve to the French army a military spirit and an instruction which would keep it constantly ready for war. But there is just now a vaster field for such exercises,—Algeria, which, if it makes us pay dear for its benefits, endows the army most richly in the matter of which I have spoken.

I cannot close this chapter without entering into some details as to the manner in which regular armies are formed in Europe; it is curious to see in what respects the armies of former times differ in their composition from those of the present day: the consequences drawn from this comparison will themselves offer food for reflection.

After the invasion of the barbarians, and the destruction of the Roman power, all special military organizations had disappeared in Europe. For many centuries,

* This was the camp of Zeist, already referred to by the author with great affection and eulogium.

† These ideas seem to be carried out in the entrenched camp at Chalons, prepared by Louis Napoleon; and in the English camp at Aldershott.

armies had no other basis than that of the feudal constitution. When experience had demonstrated the weakness of these temporary reunions of men, assembled in haste and without rule, which were suddenly dissolved, whether by the caprice of the great lords or by the exigence of their wants, and which thus rendered impossible every operation based upon calculation, the problem undertaken was to create regular and permanent means of power.

The sovereigns, however invested with the *right*, were without effective power over their vassals. To free themselves from this dependence, as soon as their finances permitted, they wished to have their own troops; and such was the origin of independent companies, (*compagnies d'ordonnance.*)

But regular revenues were necessary constantly to maintain troops under arms; and, on the other hand, regular revenues are not obtained without order and a certain administrative organization; the creation of armies was then at once the cause and the means of a commencement of civilization.

Nevertheless, the feudal system, placing the people in the hands of the lords, the latter were far from favoring the establishment of troops destined to overthrow their power; the sovereigns, being only able to dispose of their private domains, very limited, were reduced to regular enlistments, made for stated sums of money.

The disorders which existed throughout Europe, the constant wars which were waged, the multitude of petty sovereigns, rendered the people miserably poor, and pre-

sented to them the trade of the soldier as a resource. The morals of the age moreover allowed each one unlimited hopes of ambition.

A soldier might aspire to everything; and his combinations had no other element than his personal interests. The motive was not then as now the single thought to perform his duty towards his sovereign, to defend his country and to win glory,—that reward of public estimation so precious in our day. Soldier or captain, each one craved riches, and often raised his aspirations as high as a sovereignty. The Visconti, the Sforzas, the Scaligeri, the Ezzelini, and many others, had no other origin, and, before them, kingdoms had been the prey of certain Norman adventurers. Sovereigns, to facilitate the execution of their plans, were all obliged to employ, as intermediaries, warriors of reputation and credit, who, devoted to that profession from boyhood, were acquainted with many men capable of seconding them, and ready to share their fortunes.

Each one of these, in his sphere, had his roll of clients, and they united in furnishing regiments for any given enterprise.

Ferdinand II. (of Germany) sent for Wallenstein, and asked him for an army.* Conditions were discussed, and

* This was in 1624–5, just after the opening of the "thirty years" war. Wallenstein's terms, which were accepted, were that he would raise and support an army of 50,000 men at his own expense, if he should have unlimited command of them, and be allowed to indemnify himself from the conquered lands. Nothing could more forcibly illustrate the barbarities of war in that epoch.

the treaty concluded. Wallenstein sent for officers in whom he had confidence, and negotiated with them for regiments, associating them in his benefices. These latter enlisted captains, who took upon themselves the charge of forming companies and of finding soldiers; and the army was created. It is just as in our day a monarch negotiates a loan with a rich banker, who distributes the greater part of it among his correspondents, associating them in the profits which he counts upon making; and these, in turn, seek for the money they need in the purses of private individuals.

It is understood that such an organization made the regiment the property of the colonel who had formed it.

Hence the names which they have received and have preserved in Austria, where, although they have become the regiments of the monarch, as in all other countries, they have nevertheless maintained, in some sort, their primitive physiognomy, and preserved their own constitutions and privileges. Moreover, the system followed there, which has put the institutions in harmony with state interests and present customs, offers, at the same time, a noble and splendid reward to generals whose lives have been rendered honorable by glorious services, and guarantees to the sovereign the proper choice of officers and the good spirit in the corps.

This is a fitting place to remark the immense difference presented in the composition of armies at the present day and in the preceding centuries. Our armies are formed by conscription; it is so in all the continental states, but not

in England, where special circumstances explain the maintenance of a system existing nowhere else. Armies in our day are of too great numerical strength for voluntary enlistments to supply their needs; moreover, there are not enough men to whom military service is a resource necessary to their livelihood; public order, which everywhere reigns for the good of humanity, greatly diminishes this number. Finally, the chances of good fortune in this career are too limited to lead men of some station to choose it. Other openings are provided, by the development of industry, to ardor and intelligence, and fortune presents herself in these without danger. Forced enlistments are then the only means of providing for the defence of the state; and a tax of blood has become everywhere one of the public claims.

The spirit of armies has been greatly modified by this; but it is by no means lost, notwithstanding appearances. Voluntary enlistment, with a terribly rigorous discipline, has sometimes made, as in England, good troops; but can we compare, for intelligence and morality, an army composed of young men of family, brought up in a spirit of order and obedience to laws, to one which, containing perhaps a few individuals animated by the love of war and of glory, is composed, in great proportion, of vagabonds, who are driven, by their bad morals, from a quiet and industrious life?

How much better are the public interests secured, when they are confided to those who look upon the military service as a noble and important duty! The young man

upon whom the lot falls, pacific in his manners, may leave his family with regret, even with grief; but the warlike spirit so natural to man, and particularly to the French, soon inspires him; then he cherishes noble thoughts; he becomes greater in his own eyes; he is faithful, he is devoted, and he finds in the good opinion of his commander and of his companions the reward of his sacrifices, his labors and his dangers. Such, at the present day, is the European soldier; for the system is everywhere uniform.

It may still be necessary to determine which is to be preferred of the two following systems: whether to place recruits from the same locality in the same regiments, or to distribute them into different corps. The first plan is adopted in Austria, Prussia and Germany; the second in France and Russia. Each has its advantages and disadvantages; but my judgment is in favor of the first system.

To begin with the disadvantages, this system gives to the soldiers a local and provincial spirit which, after the numerous revolutions we have experienced, would not be without danger, if such circumstances could be foreseen. Perhaps also it lessens, in time of peace, the military spirit, and tends to form an assemblage of peasants rather than of soldiers; but these disadvantages are easily remedied, if the reunions are multiplied, and the duration of camps of instruction prolonged.

As to the advantages, they are great and incontestible. As regards the administration, the enlistment is easier; the officers of the corps have the means of keeping an

eye on the men who are on leave; the transition from a peace footing to a war footing is marvellously simplified. As it concerns the *morale*, there is an increase—and the effect is important—of those sentiments of honor which render all the soldiers pensionaries of the glory of their regiments, by giving them in addition the task of defending the reputation of the province in which they were born. It is an additional motive, a new encouragement.

Besides, a distinguished soldier is rewarded for his good conduct, by the consideration he enjoys in his corps; now the system followed in France deprives him of this advantage, when he retires from service. Returned home, he is no longer known; he loses the greatest reward of his life, the good renown which he has acquired. It would follow him to his fireside, if he found there the companions of his youth; he would remain surrounded, until his death, by the glory (*auréole*) which he might have deserved and obtained.*

* The council of war, in 1828, considered this question. General d'Ambrugeac, one of the most distinguished officers of the army, reporter of the infantry committee, had presented a mixed system, which, by creating an excellent reserve, solved the question in a perfectly satisfactory manner. By a strange fatality, few of the works of this council, in which military questions were debated and deliberated upon with care, received a practical solution.—M.

CHAPTER II.

MILITARY SPIRIT, AND THE DIFFICULTIES OF COMMAND.

The assemblage of 100,000 men, in the same place, far from their families, from their property, from their interests; their docility, their obedience, their ease of combined movement, (*mobilité,*) and their preservation; in short, the spirit which animates them, and—at a signal given by one man only—impels them to precipitate themselves with pleasure into imminent danger, where many of them will find death;—all these surely constitute one of the most extraordinary spectacles which can be presented by men in society; a phenomenon the cause and principle of which are to be found in the mysteries of the human heart.

It belongs to our nature to seek for and to love the emotional; the idea of danger is pleasing, although at the most threatening moment, there are few men not disconcerted by it. But we need to compare ourselves with others; emulation is natural to us; every one aims to think himself, and to see himself, superior to his fellows. Such is the motive by virtue of which the instinct of self-preservation gives place to noble bursts of courage.

The sphere of activity in which self-love acts depends upon the situation of the individual. Every one wishes to be seen and admired. The man placed in a crowd

sees his horizon in what immediately surrounds him; in a more elevated situation, this horizon widens; when we have reached the summit, the world opens to our contemplation.

This sentiment, so honorable to man, inspires the most generous actions. It is the motive alike of the private soldier and of the general. Thus, in all its grades, the profession of arms is noble, because, for all alike, it is composed of sacrifices, and is rewarded, before all, by public estimation and by glory. To speak disdainfully of those who compose the rank and file of armies, is a kind of blasphemy; even to speak of them with indifference is to misconceive the very conditions of our nature.

The elevated sentiment which I have just described is compatible with another very noble sentiment—that of friendship.

Community of danger, of glory, of interest, establishes the closest and sincerest ties; and as everything has its points of contact and its connections in the great mystery of society, it is precisely in a state of war, and in the midst of dangers—where society has most need of them—that we find most habitually displayed friendship, or the habit of companionship, (*camaraderie,*) and that *esprit de corps* to which opinion has imparted so much strength.

The exchange of services rendered, reciprocal assistance received and given, doubles—indeed increases tenfold—the strength and security of each individual. Thus opinion produces, develops and exalts the virtues among men in proportion as circumstances render their practice more necessary to secure their preservation.

But the heart of man is easily swayed, and the best sentiments are combated by others, which spring from the same principle considered in a different light. I brave a danger to save a comrade, because I count upon him in a similar emergency; but let the immediate danger seem to me too pressing; let fear rise superior to the interest which draws me to the succor of the individual menaced, and the instinct of self-preservation presents itself to my eyes when viewed in the light of present peril; I hurry away from the danger, forgetting all the motives which should have impelled me to brave it. The sentiment which has then overpowered me, which is called fear, is not uncommon in the presence of real danger; it is even much more common, and exercises a greater influence than is supposed, upon a great number of persons.* It is exactly to combat this and to nourish the opposite sentiments, that the power of discipline has been called to the aid of authority; and as example greatly influences the conduct of men; as the pre-eminently brave often carry others along with them, we cannot too richly reward, in every way, those who rise superior to common rules, in

* From no one could such an acknowledgment of human frailty come, with greater warrant of truth, than from the valiant and sometimes rash marshal.

Not to speak of numerous striking instances of Marmont's valor, the defence of Schœnfeld, in the great battle of Leipsic, may be cited as a particular example; that suburb was carried by the Russians five times, and as often retaken by Marmont; his aide was killed at his side, and when, with overwhelming numbers, the Russians finally occupied it, they left 4000 men upon the field, as proof of the tenacity of the defence.

order to increase their generous dispositions; for upon such the fate of battles often depends.

Bravery, in the armies of Europe at the present day, and particularly among officers, may be thus classified:—

The courage which keeps one from dishonoring himself, which causes him to perform his duties rigorously;—this is not rare.

That which impels a man to exceed his duty;—this is much less common.

That, finally, which decides a man unhesitatingly to make his life subordinate to the success to which he is to contribute;—this is the rarest possible. Therefore, when such valor is displayed, honors, wealth and consideration should be its reward; and the opportunity for conferring these rewards, thus limited, is so infrequent, that the expense would never be burdensome to any state.

The sentiments of which I have just spoken are not the only ones which ought to find place in the hearts of soldiers. It is necessary, in order to give to troops their entire value, that confidence should exist among all those who compose an army. The soldier must believe in the valor of his comrade. He will be convinced that his officer, equally brave, is his superior in experience and knowledge; he will take for granted in his general the same valor, and still more science and talent: thus the army forms a bundle of rods which nothing can break. This is the first condition of the strength of armies, the first element of success.

But this fundamental base which we call **confidence** is

only possible among tried and veteran troops, and not among new troops who do not know each other. Hence the absurdity of the system of a national guard, designed to take the place of regular troops. The national guards, supposing them to be composed of everything that there is bravest on earth, will never be worth anything at the beginning; for, as the valor and capacity of each cannot be appreciated by the others until they have experience of each other, the first attempts will be made without the aid of mutual confidence, and will probably lead to great and irreparable misfortunes.

The entire *morale* of war, for the general, consists in knowing the motions of the spirit which animates soldiers; in the rectitude of the judgments he forms, and of the application he makes of them, in the varied chances of war, as well of his own troops as of those which he has fought and is going to fight. These constitute an independent faculty in the profession of arms; nothing less than an appanage of genius. All great generals have possessed it, and never did any man in the world have it in a higher degree than Napoleon.

Discipline, the auxiliary of courage, is necessary also as a means of order. We may perceive its entire importance by reflecting upon the mechanism of an army, and by asking ourselves how such a multitude can subsist in motion as at rest.

It is not sufficient to assemble men in greater or less numbers to constitute an army. They must then be organized. I have elsewhere explained by what mechanism

obedience is assured, by placing the commander, in the different military grades, in concert with a limited number of men, upon whom he can easily exercise his powers.

This division once made, and this organization established, discipline must be arranged; that is, the subordinates must be habituated to a passive deference towards their superiors.

Then we arrive at instruction.

Thus three operations are necessary to convert a mass of men assembled together into an army:—

1. To **organize**; 2. To **discipline**; 3. To **instruct.** And the complement of the organization, discipline and instruction, is **confidence** — an essential element — the absence of which deprives an army of a great part of its value. This confidence should extend to all and each: confidence of soldiers among themselves, in their reciprocal relations; confidence of each officer and soldier in their higher commanders; and especially in the commander-in-chief.

This important element, which acts so powerfully upon results, produces the greater effect in proportion as the soldiers are more intelligent; for confidence founded upon a knowledge of men and things is not an unreflecting sentiment, a blind faith.

Soldiers without intelligence have little mobility, and vary less than others who are livelier and more able to reason. The former are more easily commanded, and there is less disadvantage in giving them generals of limited capacity. The others, on the contrary, will have

more or less value according as the general is more or less worthy to command them.

In speaking of these two kinds of soldiers, I have especially in view the Germans and the French. The Germans have often achieved successes with leaders of very moderate ability; the French are worth ten times as much with a commander whom they esteem and love.

They sink beneath all comparison when commanded by a general who inspires neither their esteem nor confidence. They proved this at Hochstadt, (Blenheim,) in 1704; before Turin, in 1706; and in 1813, at Vittoria. The reason is simple. Men do not go to war to be killed! They always go to conquer the enemy; and if they run the chance of dying, it is on the condition that the supposed sacrifice of life to which they submit will be useful. Let the moment come when an intelligent mass has before it no probability of victory, no chance of a glorious combat; from that moment they hesitate to compromise their lives, and seek to preserve them for an occasion when they shall be able to accomplish the sacrifice more usefully.

I have sought to explain the different emotions which succeed each other in the hearts of soldiers; movements whence result phenomena apparently contradictory to the eyes of the ignorant, who, looking upon men as passive machines, do not comprehend the variations of which they are susceptible. I shall now touch upon the question of command, and shall endeavor to establish the qualities which it renders necessary.

The art of war is composed of two distinct parts: the profession properly so called, and the moral part, the appanage of genius. I have already expressed my opinions concerning the moral of war; I shall only add one word as to the qualities which confer upon a commander authority over those who surround him.

There is, in the first place, in certain individuals the faculty of acting upon the minds of others, a natural authority which demands an easy obedience. This authority is a special gift, and springs from causes hidden and above our comprehension. One, who was a subordinate yesterday and is to-day a commander, handles his power, at the moment he is invested with it, with as much facility as if he had always been clothed with it. Another—and the example is not uncommon—exercises an authority over his equals which they do not contest, although it rests upon no right, and although he is not gifted with a superior mind; this is a faculty belonging to his individual organization. The lawfully-appointed chief who possesses this power, inspires a salutary fear. He is considered severe, and the severity which he is supposed to feel really dispenses with its exercise. A look, a word, acts upon minds with irresistible ascendency. Such men are designed by Providence to command others.

But as this powerful and natural action over one's fellows is rarely met with, obedience has been insured by accustoming subordinates to respect and reverence their commanders. Grades have been established to determine the rights of command, and to place in proper social rela-

tions, distinct and constant, those who are invested with them. To the higher grades public honors have been decreed, in order to strike the minds of others, and speak to their imaginations. In a word, nothing has been neglected to increase, in public opinion, the greatness of the depositaries of power, to the end that obedience may be better assured; an easy task in ordinary times, and when nothing opposes the preservation of good order, but difficult in moments of danger, suffering and passion. When the general has a reputation for courage and capacity, which calls for esteem and gives birth to confidence, his power is augmented; when to this he unites a great and noble family name, and his social position is very elevated, he is still greater in the eyes of the multitude. The more the depositary of authority possesses power and credit, the more we recognize in him the ability to distribute rewards, and the more easily is he obeyed.

All these means, united in the person of Napoleon, greatly favored his successes. They compose, if I may so express myself, the necessary conditions of command. But what are the personal faculties which command requires?*

* I have here established the conditions which are most favorable to command; and it results from them that when the general is at the same time the sovereign, everything conspires to aid him. Absolute freedom in his projects, in his movements and in his operations; the accumulation of means and of resources; the absence of responsibility; the power to experiment with hazardous combinations, which, with great chances against them, promise also great advantages; the certainty of being always obeyed whatever may happen, and zealously served, etc. etc. Differing from a situ-

The art of war, considered as to what constitutes the profession, is entirely combination and calculation. In this view of the subject, I entered into circumstantial details when treating of strategy and tactics. But in

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ation so advantageous, a simple general has never at his control more than limited means. Whatever be his powers, he can only exercise them within certain limits. It is not sufficient that he should do well, but he must hold himself in readiness beforehand to justify his enterprises. In a word, the obedience due him may be rendered doubtful; and rivalries, hatred, intrigues, may become powerful auxiliaries to the enemy against whom he is fighting.

These two situations are not to be compared; and the merit of the general who is successful far surpasses that of the sovereign. Thus the glory of Napoleon in Germany does not nearly equal that of General Bonaparte in Italy. In the first campaign, without name, without experience in command, with feeble and incomplete means, an army inferior in numbers, and ill-provided, he obtains brilliant successes, conquers Italy, and secures it. In the other campaigns—leaving out of the account the splendid combinations developed by them,—the greatness of means, their accumulation, the abundance of resources of every kind, seem to conspire to take away from genius the trouble of assuring the victory.

The chances of success being more numerous for the military sovereign than for the general, the desire would be natural that the former should command; nevertheless it should be otherwise.

In the first place, who is a competent judge of a sovereign's talent? And who will insure that these illusions will not be the cause of inspiring in him a fatal confidence? Supposing even that he does not take upon him supreme command, until he has made numerous essays, there will always be great danger to the state. For reverses, should they occur, will attack in popular estimation the consideration due to the principle upon which the power is based: immense social misfortune! Add to which the command of armies should, for the public interest, be submitted to control. Whatever be the latitude given to a general, there are limits which he must not pass; and if he be freed from these, who will insure moderation in the chances he wishes to try? The greatness of

order that combinations should give favorable results, a strong will must preside; for changes in fixed ideas, without sufficient motive, have many disadvantages, and often produce great disasters.

Two things then are requisite in a general: **intelligence** and **firmness**. The former, because without that there are no combinations; at the outset the army is defenceless. The latter, because without a strong and tenacious will, the execution of the plans conceived cannot be assured. But here relative qualities govern absolute qualities; firmness must rule intelligence. In this relation is found the element of success. If we desired to estimate by figures each of these faculties, I should much prefer a general possessing intelligence as 5 and firmness as 10, to one having intelligence as 15 and firmness as 8. When firmness governs intelligence, and mind has a certain range, we move along towards a defined aim, and have chances of attaining it. When the reverse is the case, opinions, plans and direction are changed unceasingly, because a vast intelligence at every instant considers the questions under a new aspect. If force

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catastrophes is always in proportion to the accumulation of means, and the extent of enterprises; and then they shake society to its lowest foundations. The errors or misfortunes of a general are always reparable in a great country; those of a sovereign, whose imagination is excited, lead to complete ruin. Therefore a sovereign should limit himself to governing, administration, the creation of means, and rendering them abundant; he ought especially to bestow a large confidence upon the general who is worthy of it, and reward magnificently and without jealousy; but never assume the responsibility and charge of command.—M.

of will does not secure us from these changes, we float among the different schemes, adopting none definitely, (the worst feature of all,) and, instead of approaching the goal, a shuffling march often leads us away from it, and we are lost in wanderings.

And yet the conclusion would be wrong that there is no need of much mind to accomplish great ends. A *mediocre* mind is not to be found in any of the great generals of antiquity or of modern times, in any of the great historic names which march through the centuries above their fellows. Alexander, Hannibal, Scipio, Cæsar, possessed the highest faculties of intellect. It was the same with the great Condé, Luxembourg, the great Eugene, Frederick and Napoleon. But all these great men, to a superior mind added still more strength of character.

This necessity that the will should govern the intelligence, is felt at every moment by the commander; for in this position it is frequently necessary to take a certain course, and to decide upon it. What men without character most dread is, to fix a determination; a fatal instinct leads them to postpone a resolution often urgent, and which, when it is formed, is no longer useful as a reason for delay, and even sometimes becomes fatal.

This remark authorizes me to proclaim the following principle:—a general may indeed take counsel when he feels the need of it; but the habitual part of office counseller, unless at the special request of the commander-in-chief, cannot be successful.

The necessity of adopting his own resolutions is then the

painful part of a commander's duty. At that moment responsibility appears, with its imposing train, with all the interests resting upon it, and which, above all, one defends in the bottom of his heart; responsibility towards those on whom he depends; responsibility as it concerns public opinion; responsibility to himself, to his own conscience; immense responsibility, more terrible in proportion as one is more penetrated with the sentiment of its duties. There is but one way of supporting this burden: he must have force and resolution enough to place himself above all consequences, sure of finding in his conscience and in his intentions a generous approbation of what he has done, after having made the best use of all his faculties and of all his intelligence. But there are very few men capable of placing themselves upon such an eminence as this. The necessity for prompt decision is at once so important and so difficult in command, that when the course adopted is of such a nature as not to receive any modification, when the cannon is roaring, and the battle is going on, when each one has had indicated to him the part he is to play, the commander-in-chief is tranquil; he has recovered the security and repose of mind which he could not have the evening before.

Thus, then, when a general possesses the mind to see, judge and combine, and the will to execute; when to these qualities he unites a knowledge of men, of the passions which sway them, of the secret emotions of their hearts, developed in war by so many causes; when, moreover, danger, far from paralyzing his faculties, only increases

their power and gives them new energy; when, finally, he loves his soldiers, is loved by them, and carefully guards their preservation, their interests, their welfare, like the father of a family;—then he unites all the qualities which promise success. I say promise—not assure; for war has such varied chances, it is subjected to so many hazards, that there can never be certainty before the event is accomplished.

In treating of the qualities necessary to the exercise of command, I have meant to speak of the command in chief. A command, however extensive, cannot, when made subordinate, be at all compared with the chief command, however the latter may be restrained by the number of troops; for there is no longer the necessity of overcoming that great difficulty which I have endeavored to make manifest, which consists in resolution. I commanded, under Napoleon, armies of different strength, and *corps d'armée*. Ten thousand men only, given up to the combinations of a single chief, present incomparably more embarrassment, and give rise to more solicitude, than the command of fifty thousand, forming a subordinate part of an army of two hundred thousand. In the latter case, to move, march and fight, according to given orders and with a specified design, are easy things; and when the fight or the marches are terminated, when the camp is established, the general rests himself, like the lowest soldier, waiting for orders: at this very moment, on the contrary, the commander-in-chief is most a prey to disquietude, and must exercise every kind of foresight.

CHAPTER III.

PORTRAIT OF A GENERAL WHO FULFILS ALL THE CONDITIONS OF COMMAND.

I WILL here give a summary, in few words, of the qualities and the manner of life which should be possessed by a general called to command.

He is brave, and known to be so by the whole army; his courage cannot for a moment be questioned or become a matter of doubt. His valor is characterized by calmness and coolness, (*sang froid,*) without, however, excluding, in certain circumstances, that dash and activity which are contagious and attractive. If his reputation, in this respect, is not sufficiently established, he should seek and seize an opportunity for fixing it upon an immovable foundation; otherwise he cannot exercise over generals, officers and soldiers, that power of respect and esteem indispensable to his success.

Once his reputation is established, he should avoid, without betraying too much concern, being prodigal of his life.

His mind must, as I have already said, be kept in subordination to his will.

His physical strength should resist the greatest fatigue, and considerations of health should never keep him from seeing, for himself, into important matters; for the most

carefully-prepared reports, the recital of the most skilful persons, can never supply, to the same degree of precision, the knowledge which one obtains with his own eyes.

If nature has endowed him with high faculties, it is desirable that he should attain early to command; his successes will in that way be rendered more certain. He will have that marvellous energy and that self-confidence which double his strength. An object of sympathy to all who are young in the army, he will display at the same time a great deference for age, and must be gifted personally with sufficient experience. There are things which only time and experience teach, and which are never guessed at. But too long a habitude of obedience diminishes rather than develops the faculties of command.

It is especially necessary that he should have had practical knowledge of war when very young, and but a little after his entrance upon the career of arms; otherwise he will acquire with difficulty that tact and instinct which such early training creates, and which wonderfully simplify the difficulties of the art.

He will ceaselessly bear in mind that a surprise never happens except as a consequence of culpable neglect, and that a general surprised is dishonored.

It is not only himself but his subordinates also, whom he must shelter from reproach, by preventing their mistakes.

Knowing the value of time, the only treasure which cannot be supplied, he will dispense with writing much

himself, leaving this labor to those who, by explicit function, are charged with transmitting his orders. He will reserve to himself only the approval of their work. Never has a good general written much in war movements. It is the head which must then work, and not the hand. He employs his time more usefully in giving verbal instructions, in preserving freedom of mind to judge whether his intentions have been faithfully rendered, and in meditating upon new combinations.

His activity should be unbounded; his presence, often unexpected, will render every one fearful of being caught in fault; he will thus nourish the zeal of all.

All his decisions will be ruled by an impartial justice and severity in maintaining order and discipline,—thus securing to soldiers the enjoyment of their rights, the greatest welfare compatible with their situation.

If severity is one of his duties, there is another more agreeable to perform, which is not of less importance: I mean rewards due to meritorious actions and to good conduct. He should be neither prodigal of them nor parsimonious; he should consider it his own business to procure them, by making them of more value even than if they were personal benefits. He should especially consider the claims of merit; for if a just reward acts as an encouragement to generous hearts, a reward not deserved destroys all emulation, and gives rise to intrigue. The instinct of man, and his innate love of justice, should always inform the mind which presides at the distribution of rewards.

If the general is faithful to his principles, if he fulfils the conditions which I have enumerated, he will be an object of respect, esteem and affection to the troops. The need of order is so energetically felt by soldiers, that they always love, in a commander, the severity which guarantees it; and they rest with confidence upon him whose decisions are accompanied with known firmness and equity.

Goodness without force is nothing; it confuses itself in opinion, and in reality, with the weakness which abandons a commander to the influence of his surroundings. But goodness, united to a rational severity, makes a general the idol of his soldiers. Rigor, however great it may be, demands certain forms, and should never become insulting: a man is resigned to merited punishment, but abuse irritates him. A just punishment produces the more effect in proportion as it is inflicted with great calmness; violence in a commander authorizes the murmurs of the guilty subordinate. A general, besides, should always treat with consideration every one wearing a soldier's coat. There is in the profession something so noble, the sacrifice of life is so sublime, that those who, by their condition, are always ready to offer it, have a right to our regards, even when they deserve an act of severity.

A general should be habitually grave in his manners, as far as concerns his subordinates; and yet this authority even does not exclude a kind of familiarity, of dignified gaiety, which inspires affection and esteem. There is a sentiment of fraternity, very naturally springing from a

community of dangers, privations and fatigues, and which has nothing incompatible with the rules guarding rank, and the maintenance of discipline. The more then a general forgets his superiority, the less does a soldier lose sight of it. A general should be accessible to everybody.

He should receive and open all despatches at the very moment of their arrival, without letting any consideration of his own comfort cause him to defer it. In the midst of the fatigues of a campaign, although he may have been awakened twenty times in one night, to receive unimportant news, he must not prohibit his people from rousing him again. War news may be of such importance, and the delay of two hours may become so fatal, that the fate of an army sometimes depends upon his immediate knowledge.

A general should be as magnificent as his fortune will allow. His greatest luxury should consist in a large number of horses; he must have enough not to be hindered in any plans he may deem useful. He should have, as the next object of his magnificence, a mansion in which he can constantly dispense hospitality. Never should an officer come to his headquarters, on service, without receiving testimonials of it. It is, in the first place, a praiseworthy act in itself: for the staff officers, or officers separated from their corps, are in such unfortunate conditions as to living, that they would be reduced, if the general did not have a care of them, to a state of real want. To this humane consideration is joined another interest,

which regards the good of the service itself. An officer, charged with despatches, hastens his arrival when he knows beforehand the reception which awaits him. He quickens his march from affection for his commander and for himself. Time, always elsewhere useful, plays so important a part in war, that it must by every means be economized.

A general should neglect no means of knowing in advance and in its details, the country in which he is going to make war. He should procure its most accurate statistics; he should know in what its resources of every kind consist, by carefully studying its topography. The least negligence in this study may have the gravest consequences. He cannot too carefully reflect upon all the circumstances which characterize a country, and on the means of rendering them useful. By procuring, at any price, the best maps, by ceaselessly examining them, even in a general manner, he may be sure of acquiring ideas sometimes felicitous, and of immense value in their application.

The insufficiency of information almost caused the failure, in its beginning, of the immortal campaign of Marengo, in 1800, and produced many difficulties. The First Consul was not aware of the existence of the Fort of Bard, and its means of resistance. We could easily have taken it, by carrying with the advanced troops pieces of sufficient calibre. It was not known that the Little St. Bernard, which debouches, like the Great St. Bernard, in the valley of Aosta, was practicable for artillery; the

passage of the mountains would have been more prompt, without presenting all the obstacles which have constituted it one of the most remarkable operations of our epoch. All projects demand the profoundest secrecy; a general should never communicate them except to those charged with their execution, and at the very moment when their knowledge of them becomes necessary. How many enterprises, well conceived, have failed by reason of having been known to the enemy! Nothing, on the contrary, is more favorable to success than to allow an opposite opinion to the true one to be formed; it is by deceiving those who surround him that a general will make the change more effective upon the enemy.

But in proportion to the importance of concealing his plans, he should inquire into those of the enemy; in this respect he should neglect nothing. Without having a blind faith in spies, he should keep them and pay them well. It is especially useful to procure intelligence by means of employés attached to the staff-corps.

If he succeeds, his first care should be to learn, in detail, the organization of the different corps which compose the enemy's army, and the names of the generals commanding them. With this aid, and light troops well commanded, who, constantly harassing the enemy, make prisoners, sure documents are obtained of the movements he is making. The capture of a single soldier of a certain regiment, announces the presence of a certain division, belonging to a certain corps, and from these facts a general sees the spirit and aim with which his

adversary operates and manœuvres. It is difficult to form an idea of the candor, simplicity, and truth with which a prisoner answers, without suspecting the bearing of the questions put to him, and without thinking that he is recreant to the cause he has zealously served, and which he is very far from wishing to betray.

In fine, the general who values his own glory, should free himself in his operations from absolute dependence; it is always fatal. An enlightened government has not the desire to direct everything; it limits its part to an indication of the aim, after having determined the nature of the means and their quota. It is for the general alone, placed in the presence and in the midst of difficulties, to decide upon the system to be followed and the combinations to be executed. Rather than submit to too direct an action on the part of the government, the general should abandon a command which he cannot exercise in its fulness. Either it should cease to oppose him, if he preserve its confidence, or it should retire him from the command if it think he is proceeding in an improper manner. Government should only act upon the general who has its confidence, through the influence of counsels which do not bear the character of imperative orders; it should especially avoid placing near him an office-councillor; for nothing is more absurd than such a system, and as I have already said, its results have always been fatal. A general may indeed excite discussions, consult men of experience, even receive advice when he thinks it useful to him; but he must never be required to

ask it and to defer to it. In general, in an army, there are only two parts to play:—to obey and to command. Let the government give the command of its armies to those whom it thinks the worthiest, and at the same time let it concede to them an unreserved confidence: otherwise it should replace them.

CHAPTER IV.

THE REPUTATION OF GENERALS.

I WILL close this work with a few reflections upon the reputation of generals, and the reasons upon which it is established.

Generals sometimes attach their names to successes with which they have little or nothing to do; successes obtained in spite of their ill-conceived dispositions, or in consequence of advice received, and appropriately followed.

I have known many of this kind: among others, and the most notable, Marshal Brune,* who, in every respect, was extremely *mediocre.* His name nevertheless is associated with three glorious souvenirs:—with the successes of the French army against the Swiss, in 1798; against the English and the Russians, in 1799; against the Austrians in Italy, in 1800.

In Switzerland, the superiority of our forces, and the divisions existing in that country, necessarily decided the question in his favor. In Holland, he was not at the combat of Bergen; the battle of Bewervich was fought

* In spite of his private qualities and the deplorable death of which he was the victim, we cannot help remembering that Marshal Brune was one of the most singular and striking examples of the caprices of fortune.—M.

by chance, unexpectedly delivered, without prearranged plan, without any direction: the follies and the stupidity of the Duke of York produced definite results. In 1800, in Italy, after brilliant successes, with which the general-in-chief had comparatively little to do, we were in position, had another man been at our head, entirely to destroy the enemy's army.

Contrary examples may be cited, *i.e.* of men of great talent whose efforts have been betrayed by fortune.

But these different examples should not hinder us from judging by results: such indeed is the proper manner of appreciating the value and merit of generals. To assume a different basis, to rest our judgment upon the idea we may have formed of the mind and talents of a general, is to enter an inextricable labyrinth, and often to expose ourselves to error; for each one will only see through the prismatic medium of prejudice, friendship and passion. If we sometimes deceive ourselves in judging by facts, we should deceive ourselves much more in directing ourselves solely by personal knowledge of individuals. Fortune may indeed once or twice overwhelm with her favors a man who is not worthy of them; she may betray the finest combinations of genius, and humiliate a noble bearing; but when the struggle is prolonged, when events are multiplied, the man of true talents infallibly conquers her favors; and if continual reverses occur, we may boldly conclude that in spite of a superior mind and qualities which have dazzled us, a lack of harmony in those faculties destroys their power.

I classify generals in four categories.

I place in the first the generals who have won all the battles they have fought. The first place in public estimation is incontestibly theirs. But their number is so small that we can with difficulty find their names. In ancient times, I can only find Alexander and Cæsar. The Grecian generals of illustrious name, such as Miltiades and Epaminondas, have owed all their celebrity to one or two actions.

In modern times, I find scarcely more than Gustavus Adolphus, Turenne, Condé, Luxembourg, and Napoleon until 1812; for I am correct in placing in the number of reverses for which a general is responsible, the destruction of armies through want of proper care and extreme lack of foresight.

In the second category I will place the generals who, if they have often gained victories, have sometimes lost them, after having desperately contested them. These are the great majority of those whose names are inscribed in the temple of memory. Perhaps among them may be found some who are worthy to figure in the preceding class. For between two generals who contend with equal merit, victory must indeed decide for one or the other, but it will have been dearly bought, and its results will be limited.

In the third category will be ranged the generals who, habitually unfortunate in war, and having experienced many reverses, have never been destroyed, nor discouraged, but have always been able to oppose a menacing front, and to impress the enemy with fear.

These generals are rare, and they must have great ascendency over those by whom they are surrounded. Such in ancient times were Sertorius and Mithridates, and in modern times the celebrated Wallenstein and William III. King of England.

Finally, in the fourth category, there will naturally be found those who lose their armies without fighting, or without making the enemy pay dearly for his victory by a vigorous resistance. As to such, it is easy to mention their names; every country, every epoch, has furnished examples.

CONCLUSION.

From all that has been now said, I think I have a right to draw the following conclusions:—

1. The fundamental principle of the organization of an army is found in the fact, and the spirit of aggregation, of an assemblage of men, which becomes a compact mass, a unit; and which, by a skilful and ingenious mechanism, gives great mobility to the different parts of which it is composed.

2. The parts which constitute the elements of this whole must have dimensions, form and limits, which are the necessary consequences of the faculties of the man and of the arms he uses.

3. Nothing is arbitrary in the organization of troops and in the movement of armies. On the contrary, everything must depend upon regulations derived from certain laws. To apply them properly forms the whole of the science of war.

4. An army is composed of *materiel* and *personnel.** There are natural and determined relations between these two elements, which, however, vary, according to the circumstances and the aim which is proposed. Their pro-

* Although these words have been used throughout the work, it may be well to state, in this summary, that *materiel* includes stores, munitions and equipments of every kind; and *personnel*, every force and contingent of men; the former, the things used in war, and the latter, those who use them.

portions do not depend upon caprice, but only upon the nature of things.

5. The greater or less amount of excellence in these elements exert a powerful influence upon the results; and here the quantity yields in importance to the quality.

6. A third element enters into the value of an army: that is, the moral element. It alone often surpasses in importance all the others, while these, however, have an effective power of the first value; for the corps must exist in order that spirit may animate it. Thus, beyond a certain limit, the real strength of an army is not increased in proportion to the number of troops and of material means; but much more in proportion to the animating spirit.

7. To develop the spirit of an army, to increase its confidence, to speak to its imagination, to elevate the soul of the soldier, such should be the constant object of the cares and efforts of the general.

8. The chief element of military spirit is *esprit de corps;* it is a powerful resource, which cannot be too much maintained. In the opinion of each soldier, the army to which he belongs, and his general, should be invincible; his division the best in the army, and his regiment the bravest and most renowned. With these convictions his strength and courage are increased tenfold.

9. In a word, every soldier should be profoundly penetrated with the idea of his country's glory, and devotion to his prince, who is its representative and exponent: the love of country, that divine sentiment engraved by Provi-

dence upon the hearts of all men, should constantly sustain him, exalt him, and make him equal to existing circumstances. But this sentiment should not be an idle word; it must be sincere, serious, energetic; its reality must be proved, at need, by great sacrifices. The history of all times has preserved examples of this, rare, it is true, but sublime, the results of which have astonished the world.

10. The best army, then, is that which completely fulfils the foregoing conditions; their union and concord constitute its true value. As these conditions are almost all variable and of difficult appreciation; as the mind cannot embrace all possible combinations, no one can determine in advance, in a rigorous manner, the effective power of an army; he can only judge by a sort of instinct, which is not far from the truth. But later it is by the character of its actions and their results that its value may be correctly determined.

I stop here: this sketch is sufficient to effect the object which I have had in view. To give to each part of which it is composed the development of which it is susceptible, would require continued labors which I have neither the strength nor the will to undertake. I have said enough to lead the mind to reflection, and to make it manifest that our sublime profession is based upon principles from which we should never wander: by respecting them, we give to the means of action at our disposal their entire possible value; the constant aim proposed to all who are placed in command.

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